



MODEL 8100 AUTOMATED TELLER MACHINE

USER / INSTALLATION MANUAL

VERSION 1.0

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** CAUTION **

Changes or modifications not expressly approved by Triton Systems could void the regulatory compliance approval and the warranty. Use of this product in a manner other than those described in this manual may result in personal injury!

FCC COMPLIANCE

Statement of Compliance: This equipment complies with Part 68 of the FCC rules. Located in the control area of the ATM is the product label. This label lists the FCC registration number and ringer equivalence number of the unit. If requested, this information must be provided to the telephone company. **USOC/FIC Codes:** When ordering service from the telephone company for the Model 8100 ATM, the following information should be supplied:

Universal Service Order Code (USOC): RJ-11C

The Facility Interface Code (FIC): 02LS2

Plug and Jack: The plug and jack used to connect this equipment to premise wiring and telephone network must comply with the applicable FCC Part 68 rules and requirements adopted by ACTA. A compliant telephone cord and modular plug is provided with this product. The telephone cord is designed to be connected to a compatible modular jack that is also compliant.

Ringer Equivalent Number (REN): The REN is used to determine the number of the devices that may be connected to a telephone line. Excessive RENs on a telephone line may result in the devices not ringing in response to an incoming call. In most but not all areas, the sum of the RENs should not exceed five (5). To be certain of the number devices that may be connected to a line, as determined by the local RENs, contact the local telephone company.

Harm to the Network: If the Model 8100 ATM causes harm to the telephone network, the telephone company will notify the customer that a temporary discontinuous of service may be required. If advanced notice is not possible, the telephone company will notify the customer as soon as possible. You will be advised of your right to file a complaint with the FCC if you believe it's necessary.

Notification of Changes in Telephone Company Equipment: The telephone company may make changes in its facilities, equipment, operations, or procedures that could affect the operation of the equipment. If this happens, the telephone company will provide advanced notice in order for you to make necessary modifications to maintain uninterrupted service.

Repairs and Returns: If telecom compatibility trouble is experienced with the Model 8100 ATM, you may contact for repairs and warranty information: Triton at 1-228-868-1317

Triton Systems of Delaware, Inc.
522 East Railroad Street
Long Beach, MS 39560

If the equipment is causing harm to the network, the telephone company may request that you disconnect the equipment until the problem is resolved. Repairs should be made only by qualified factory representatives.

Party Lines: The Model 8100 ATM must not be used on party lines.

Alarm Equipment: The Model 8100 ATM should have its own dedicated phone line. Do not install the 8100 on the same line as alarm equipment.

Electrical Safety Advisory: Telephone companies report that electrical surges, typically lightning transients, are very destructive to customer equipment connected to AC power sources. This has been identified as a major nationwide problem. A commercially available, power surge suppressor, is recommended for use with the Model 8100 to minimize damage in the event of an electrical surge.

CANADIAN IC COMPLIANCE

NOTICE:

The Industry Canada label identifies certified equipment. This certification means that the equipment meets telecommunications network protective, operational, and safety requirements as prescribed in the appropriate Terminal Equipment Technical Requirements document(s). The department does not guarantee the equipment will operate to the user's satisfaction.

Before installing this equipment, users should ensure that it is permissible to be connected to the facilities of the local telecommunications company. The equipment must also be installed using an acceptable method of connection. The customer should be aware that compliance with the above conditions may not prevent degradation of service in some situations.

Repairs to certified equipment should be coordinated by a representative designated by the supplier. Any repairs or alterations made by the user to this equipment or equipment malfunctions may give the telecommunications company cause to request the user to disconnect the equipment.

Users should ensure for their own protection that the electrical ground connections of the power utility, telephone lines and internal metallic water pipe system, if present, are connected together. This precaution may be particularly important in rural areas. **Caution:** Users should not attempt to make such connections themselves, but should contact the appropriate electric inspection authority or electrician, as appropriate.

NOTICE:

The Ringer Equivalence Number (REN) assigned to each terminal device provides an indication of the maximum number of terminals allowed to be connected to a telephone interface. The termination on an interface may consist of any combination of devices subject only to the requirement that the sum of the Ringer Equivalence Numbers of all the devices does not exceed 5.

Avis:

L'étiquette d'Industrie Canada identifie le matériel homologué. Cette étiquette certifie que le matériel est conforme aux normes de protection, d'exploitation et de sécurité des réseaux de télécommunications, comme le prescrivent les documents concernant les exigences techniques relatives au matériel terminal. Le Ministère n'assure toutefois pas que le matériel fonctionnera à la satisfaction de l'utilisateur.

Avant d'installer ce matériel, l'utilisateur doit s'assurer qu'il est permis de le raccorder aux installations de l'entreprise locale de télécommunication. Le matériel doit également être installé en suivant une méthode acceptée de raccordement. L'abonné ne doit pas oublier qu'il est possible que la conformité aux conditions énoncées ci-dessus n'empêche pas la dégradation du service dans certaines situations.

Les réparations de matériel homologué doivent être coordonnées par un représentant désigné par le fournisseur. L'entreprise de télécommunications peut demander à l'utilisateur de débrancher un appareil à la suite de réparations ou de modifications effectuées par l'utilisateur ou à cause de mauvais fonctionnement.

Pour sa propre protection, l'utilisateur doit s'assurer que tous les fils de mise à la terre de la source d'énergie électrique, des lignes téléphoniques et des canalisations d'eau métalliques, s'il y en a, sont raccordés ensemble. Cette précaution est particulièrement importante dans les régions rurales. Avertissement: L'utilisateur ne doit pas tenter de faire ces raccordements lui-même; il doit avoir recours à un service d'inspection des installations électriques, ou à un électricien, selon le cas.

Avis:

L'indice d'équivalence de la sonnerie (IES) assigné à chaque dispositif terminal indique le nombre maximal de terminaux qui peuvent être raccordés à une interface. La terminaison d'une interface téléphonique peut consister en une combinaison de quelques dispositifs, à la seule condition que la somme d'indices d'équivalence de la sonnerie de tous les dispositifs n'exède pas 5.

UNITED KINGDOM

This equipment has been approved in accordance with Council Decision 98/482/EC for pan-European single terminal connection to the Public Switched Telephone Network (PSTN). However, due to differences between the individual PSTNs provided in the different countries, the approval does not, of itself, give unconditional assurance of successful operation on every PSTN network termination point. In the event of problems, contact your equipment supplier in the first instance. This unit uses only Dual-Tone Multi-Frequency (DTMF) address signaling.

EMISSIONS (EMI)

This device complies with Part 15 of the FCC rules. Operation is subject to the following two (2) conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

NOTE:

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense. Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

CANADIAN EMISSION REQUIREMENTS

This digital apparatus does not exceed the Class A limits for radio noise emissions from digital apparatus set in the Radio Interference Regulations of the Canadian Department of Communications. This Class A digital apparatus complies with Canadian ICES-003.

Le present appareil numerique n'emet pas de bruits radioelectriques depassant les limites applicables aux appareils numeriques de la Class A prescrites dans le Reglement sur le brouillage radioelectrique edicte par le ministere des Communications du Canada. Cet appareil numerique de la classe A est conforme a la norme NMB-003 Canada.

UK / AUSTRALIAN EMISSION REQUIREMENTS

WARNING:

This is a Class A product. In a domestic environment, this product may cause radio interference in which case the user may be required to take adequate measures.

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WARRANTY STATEMENT

Manufacturer warrants that the products delivered to a distributor will perform in accordance with the Manufacturer's published specifications for thirteen months from date of shipment in Long Beach, MS.

Manufacturer's warranty shall not apply to any damage resulting from abuse, negligence, accident, or to any loss or damage to the products while in transit.

Written notice and explanation of circumstances surrounding any claims that the goods have proved defective in material or workmanship shall be given promptly from the distributor to the manufacturer. No claim may be made, or action brought, by or through a distributor after the expiration of 14 months following any alleged breach of warranty.

Distributor's sole and exclusive remedy in the event of defect is expressly limited to the replacement or correction of such defective parts by manufacturer at its election and sole expense, except there shall be no obligation to replace or repair items which, by their nature, are expendable. If Manufacturer is unable to replace or repair the defective parts, Manufacturer shall refund to Distributor that portion of the purchase price allocable pays to such goods.

No representation or other affirmation of fact not set forth herein, including but not limited to statements regarding capacity, suitability for use, or performance of the goods, shall be or be deemed to be a warranty or representation by Manufacturer for any purpose, nor give rise to any liability or obligation of Manufacturer whatever.

Except as specifically provided in this document, there are no other warranties expressed or implied including, but not limited to, any implied warranties or merchantability or fitness for a particular purchase.

LIMITATION OF LIABILITY

In no event shall manufacturer be liable for loss of profits or incidental, indirect, special, consequential or other similar damages arising out of any breach of this contract or obligations under this contract.

DEFENSE OF INFRINGEMENT CLAIMS

If notified promptly in writing of any action (and all prior claims relating to such action) brought against the Distributor based on a claim that Distributor's use of the goods infringes a patent or other intellectual property right, and if given access by Distributor to any information distributor has regarding such alleged infringement, Manufacturer agrees to defend Distributor in such action at its expense and will pay any costs or damages finally awarded against Distributor in any such action, provided the Manufacturer shall have had sole control of

the defense of any such action and all negotiations for its settlement or compromise.

In the event that a final injunction shall be obtained against the Distributor's use of the goods or any of their parts by reason of infringement of a patent or other intellectual property right or if in Manufacturer's opinion the goods are likely to become the subject of a claim of infringement of a patent or other intellectual property right, Manufacturer will, at its option and at its expense, either procure for the Distributor the right to continue using the goods, replace or modify the same so they become non-infringing or grant the Distributor a credit for such goods as depreciated and accept their return. The depreciation shall be an equal amount per year over the lifetime of the goods as established by Manufacturer.

Manufacturer shall not have any liability to the Distributor under any provision of this clause if any infringement, or claim thereof, is based upon: (i) the use of the goods in combination with other goods or devices which are not made by Manufacturer; (ii) the use of the goods in practicing any process; (iii) the furnishing to the Distributor of any information, date, service, or applications assistance; or (iv) the use of the goods with modifications made by the Distributor. The Distributor shall hold Manufacturer harmless against any expense, judgment or loss for infringement of any patent or other intellectual property right which results from Manufacturer's compliance with the Distributor's designs, specifications or instructions. No costs or expenses shall be incurred for the account of Manufacturer without the written consent of Manufacturer. **The foregoing states the entire liability of manufacturer with respect to infringement of patents or other intellectual property right by the goods or any part thereof, or by their operation.**

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This writing is intended by the parties as final expression of their agreement and is intended also as a complete and exclusive statement of the terms of their agreement. No course of prior dealing between the parties and no usage of the trade shall be relevant to supplement or explain any term used in these terms and conditions. Acceptance or acquiescence in a course of performance rendered under these terms and conditions shall not be relevant to determine the meaning of these terms and conditions even though the accepting or acquiescing party has knowledge of the performance and opportunity for objection. Whenever a term defined by the Uniform Commercial Code, as adopted in Mississippi, is used in these terms and conditions, the definition contained in the code is to control.

MODIFICATIONS

These terms and conditions can be modified or rescinded only by writing signed by both the parties or their duly authorized agents.

WAIVER INEFFECTIVE

No claim or right arising out of or relating to a breach of these terms and conditions can be discharged in whole or in part by a waiver or renunciation of the claim or right unless the waiver or renunciation is supported by consideration and is in writing signed by the aggrieved party. Waiver by either Manufacturer or Distributor of a breach by the other of any provision of these terms and conditions shall not be deemed a waiver of future compliance therewith, and such provisions shall remain in full force and effect.

STATUTE OF LIMITATIONS

Any action by the Distributor or Manufacturer for breach of these terms and conditions must be commenced within one (1) year after the cause of action has accrued.

APPLICABLE LAW

These terms and conditions shall be governed by and construed in accordance with the provisions of the Uniform Commercial Code as adopted by the State of Mississippi.

BANKRUPTCY

In the event of any proceedings, voluntary or involuntary, in bankruptcy or insolvency by or against Distributor, or in the event of the appointment, with or without the Distributor's consent, of an assignee for the benefit of creditors or of a receiver or of a liquidator, then Manufacturer shall be entitled to cancel any unfulfilled part of these terms and conditions without any liability whatsoever.

PARTS ONLY LIMITED MANUFACTURER'S WARRANTY

Triton Systems of Delaware, Inc. warrants the components of each Model 9100 series ATM, excluding software and related documentation, against any defect in materials and/or workmanship for a period of 13 months from the shipping date. If a component fails due to defects in materials and/or workmanship within the warranty period, Triton will furnish a new or refurbished component, at its discretion. Triton shall not be responsible for labor or other costs associated with installing the components and the failed component shall be returned to Triton at the purchaser's expense. Triton shall not be responsible for misuse or abuse of a unit and any attempts to remove or deface the serial number or date code on a unit or any component thereof, or any attempt to repair a unit or to repair or replace any component by anyone other than a service technician authorized by Triton shall void this warranty.

LIMITED WARRANTY COVERS NORMAL USE. TRITON DOES NOT WARRANT OR COVER DAMAGE:

- occurring during shipment of the equipment or components from or to Triton's facilities;
- caused by accident, impact with other objects, dropping, falls, spilled liquids, or immersion in liquids;
- caused by a disaster such as fire, flood, wind, earthquake, lightning, or other acts of God;
- caused by failure to provide a suitable installation environment for the equipment, including but not limited to, faulty wiring in the building in which the equipment is installed, installation in a facility with uncontrolled environmental conditions, failure to provide a dedicated electrical circuit on which the equipment operates, and/or lack of proper earth grounding for the equipment;
- caused by the use of the equipment for purposes other than those for which it was designed;
- resulting from improper maintenance;
- caused by any other abuse, misuse, mishandling, or misapplication.

Under no circumstances shall Triton or its suppliers be liable for any special, incidental, or consequential damages based upon breach of warranty, breach of contract, negligence, strict liability, or any other legal theory. Such damages include, but are not limited to, loss of profits, loss of revenue, loss of data, loss of use of the equipment or any associated equipment, cost of capital, cost of substitute or replacement equipment, facilities or services, down time, purchaser's time, the claims of third parties, including customers, and injury to property.

DISCLAIMER OF WARRANTIES

The warranty stated above is the only warranty applicable to this product. All other warranties, expressed or implied (including all implied warranties of merchantability or fitness for a particular purpose or quality of service), are hereby disclaimed. No oral or written information, or advice given by Triton, its agents or employees shall create a warranty or in any way increase the scope of this warranty.

SHIPPING DAMAGE

All equipment is shipped Free On Board (FOB), Triton's facilities. The organization or individual who has purchased the equipment assumes responsibility for the equipment once it leaves Triton's facilities.

Should your equipment be damaged in the process of shipment or delivery to your place of destination, we recommend the following course of action:

- If possible, call the shipping company before the driver leaves your delivery site. Make note of the damage on the “receipt of delivery” paperwork. If this is not possible, call them as soon as possible to report the damage.
- Take photographs of the damaged packaging prior to opening the boxes. If this is not possible, make note of key points, such as whether the equipment is on a pallet, if the banding is intact, how the boxes are damaged, etc. Keep all of the packaging for inspection by the shipping company.
- If you unpack the equipment, take photographs of the damaged equipment. If this is not possible, make note of the damages.
- You must file a claim with the shipper for shipping damages immediately after reporting the damages.

Should you specify the carrier, we recommend that you explore with this chosen carrier the policies and procedures regarding shipping damage claims prior to selecting them as your preferred carrier.

If the equipment receives structural damage and is in an un-installable condition, Triton will work with you to arrange for a replacement unit to be shipped as soon as possible. The purchaser will be billed for the replacement unit. Triton’s repair technicians will repair the damaged unit after it is returned to our facilities. We will credit the purchaser’s account for the full purchase price of the damaged unit, minus the cost of returning the unit to ‘like new’ condition. Under no circumstances does Triton authorize anyone to complete structural damage repairs in the field. Therefore, we will not ship primary structural parts, such as a cabinet head or main cabinet body for repair in the field.

AUTHORIZED INSTALLATION AND SERVICE PROVIDERS

Triton utilizes several nationwide and regional authorized third party maintenance providers. All ATMs must be installed and serviced by service technicians certified by Triton. This includes authorized third party service technicians and technicians who have been factory trained by Triton to service ATM equipment. Installation or repairs attempted by unauthorized service technicians automatically voids the warranty on the product.

Please contact Triton’s Technical Services department at (800) 259-6672 for a list of our third party service providers and/or to obtain information on the requirements and procedures for becoming a certified Triton service technician.

TRITON'S TECHNICAL SERVICES DEPARTMENT

The primary purpose of the Technical Services Department is to provide assistance to customers in the operation, trouble shooting, and repair of equipment manufactured by Triton. A toll-free phone number (1-800-259-6672) is provided for convenience. The Technical Services department operates to serve our customers. The staff is trained to follow our policies and procedures to ensure fair and uniform treatment of all our customers.

AUTOMATED VOICE MAIL SYSTEM

Our goal is to have a 'live' person answer 100% of all incoming calls (during regular support hours). On occasion, however, call loads may exceed the capacity of the staff. When this occurs, an automated voice mail system will answer the call, indicate to the caller that all Technical Support specialists are busy assisting others, and ask the caller to leave detailed information about the nature of the call.

Should it become necessary to leave a voice mail message, the caller should state:

- their name,
- the organization for which they work,
- the **serial number** of the equipment they are calling about,
- detailed description of the problem that they are experiencing, and
- phone number where they can be reached, including area code.

As Technical Support specialists become available, they check for voice mail messages and return calls in the order in which they were received. By providing the information requested in the voice mail, the technician can be prepared when your call is returned. Triton asks you to be patient if you must leave voice mail and assures you that your call is important to us and that we will respond promptly.

CALLS FOR SERVICE OR REPAIR

Calls for service or repair will be accepted from authorized service technicians only. End users must contact either the sales organization that placed the equipment or an authorized third party service organization to obtain service. The sections that follow describe the policies and procedures that relate to the repair and replacement of malfunctioning equipment.

QUESTIONS ON OPERATION OF EQUIPMENT

Technical support is available to owners of Triton equipment and to qualified service personnel. When calling for help with the configuration or operation of a Triton product, the caller must provide either positive identification as a service technician or the serial number of a Triton terminal. Technical support is provided during normal business hours for the life of the product.

When calling for help with an operational problem, please have available information pertaining to the nature of the trouble. This includes the type of equipment, examples of what is or is not happening, and the name of the processor that supports your terminal.

All questions pertaining to the settlement of accounts, transaction inquiries, and fund status must be directed to the processor. Triton does not have access to the information needed to answer questions relating to specific transactions.

CONTACT INFORMATION

Triton Systems of Delaware, Inc.
522 East Railroad Street
Long Beach, MS 39560

SALES:

1 (800) 367-7191
1 (228) 868-1317
1 (228) 868-0437 (fax)

SERVICE:

1 (800) 259-6672 (Technical Support)
1 (228) 575-3229 fax (Technical Support)
1 (228) 868-0859 fax (Parts)

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SECTION 1

INTRODUCTION



WHAT'S IN THIS MANUAL

This User / Installation manual describes the operating features of the Model 8100 series ATM and shows how to perform the procedures that would typically be performed by the owner or operator personnel. It also includes installation procedures for the terminal.

The user manual is divided into the following sections:

Section 1, Introduction. Summarizes the basic features of the Model 8100 series ATM.

Section 2, Basic Operation. Describes the ATMs user interface, explains how to access Management Functions, and provides a basic description of operation during typical customer transactions.

Section 3, Initial Setup. Lists the ATMs setup parameters and Management Function flowchart.

Section 4, Currency Handling. Describes the standards for evaluating note quality and describes how to replenish the cash in the note cassettes and how to check for rejected notes.

Section 5, Management Functions. Describes the menu functions and available options.

Section 6, Maintenance. Describes normal preventative and corrective maintenance procedures appropriate for user personnel.

Section 7, Error Recovery. Describes the ATM's error reporting features and error codes, gives a general error recovery procedure, and provides error recovery procedures to follow in case of specific error conditions.

Appendix A, Installation Procedures. Provides step-by-step procedures for completing physical installation of the Model 8100 ATM.

Appendix B, Combination Locks. Covers how to change combinations for an electronic lock. Also provides procedures for changing the battery in the electronic lock.

FEATURE HIGHLIGHTS

Important features of the 8100 series ATM are highlighted in the following list:

- Modular architecture eases troubleshooting and servicing.
- Supports dial-up, wireless, and Ethernet (TCP/IP) communications.
- Single cassette design using a TDM-50 (new) dispensing mechanism.
- 5.7" (145 mm) monochrome or color LCD display.
- 14.4 baud modem standard (*33.6 baud optional*).
- Satisfies Americans with Disabilities Act (ADA) specifications for height and access. Audio compliant.
- VISA® Encrypting PIN Pad (VEPP) to comply with international encryption standards and Triple DES compliant.
- Dip-style card reader (*EMV optional*).
- Non UL cabinet.
- 58 mm thermal printer designed for quiet operation. The 8100 terminal is equipped with the APS CP MRS-250 printer. *There is no graphics support with the APS printer. Receipt/coupon graphics cannot be printed to the device.*
- Key lock, mechanical, or electronic combination lock .
- Supports remote setup, configuration, and monitoring via Triton Connect™ ATM monitoring software.
- Dispenses U.S. and international currency types.
- High-capacity electronic journal stores transaction details for later printout and analysis.
- Supports LED-backlit signage option (topper attachment).
- Small footprint design makes placement easier.
- Available in Bayou Bronze.

DIMENSIONS			
Width	Depth	Height (w/o topper)	Height (w/topper)
16" (405 mm)	13" (330 mm)	49 1/2" (1245 mm)	60" (1524 mm)

STANDARD FEATURES

- Management Functions.** Enable extensive control and customization of the ATM's operating parameters.
- EPROM Functions.** The EPROM function provides low-level diagnostic and software update operations.
- Password Protection.** Access to Management functions and EPROM areas is protected with passwords.
- MAC Encryption Support.** Message Authentication Code (MAC) data encryption protocol. Provides increased protection for message traffic to and from the ATM. *Triple DES compliant.*
- Encrypting PIN Pad (EPP) Entry Device Support.** Secure EPP device encrypts the customer PIN during a transaction. *Triple DES compliant.*
- Multi-Language Support.** Enables the customer to select a preferred language (such as French or Spanish) for customer screens and receipts.
- Transaction and Account Type Configuration.** Enables selection of transactions (transfers or balance inquiries) or accounts (savings or credit card) that will be presented to the customer. Does not affect availability of checking account withdrawal.
- Cassette and Day Close Reports.** Provide summary information about the number and type of transactions being performed by the ATM.
- Electronic Journal.** Stores the details of each transaction in solid-state memory. Journal data can be retrieved, printed out at the receipt printer, and transferred to a remote Triton Connect computer.
- AD Screens.** An Ad screen is a promotional or advertising graphic that is displayed on the LCD screen during idle periods. Ad screens are downloaded to the terminal by a remote Triton Connect™ computer. Text-only (non-graphic) Ad screens can also be displayed.
- Messages.** Informational and promotional messages that are displayed to the customer on-screen or printed on receipts.

INTRODUCTION

- **Coupons.** Coupons are printed by the receipt printer and prizes awarded to customers based on random and/or withdrawal amount-based transactions. Coupon text can be entered locally or downloaded using Triton Connect software.
- **Status Monitoring.** The ATM can periodically transfer status information to the host processor. In addition, Triton Connect™ remote monitoring software can be used to view the journal, monitor operation and alarm conditions, update operating parameters, and reset the terminal.
- **Front-access Cabinet.** Allows access to the dispensing mechanism and currency cassette from the control-panel side of the unit.

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SECTION 2

BASIC OPERATION



INTRODUCTION

This section describes the basic operation of the terminal. The following topics are covered:

1. **CONTROL PANEL LAYOUT.** Describes the layout of the terminal's control panel.
2. **KEYPAD OPERATION.** Describes the use of the alphanumeric keypads.
3. **MENU-BASED OPERATION.** Gives a general overview of the terminal display interface.
4. **ACCESSING MANAGEMENT FUNCTIONS.** Describes the password entry procedure that must be followed in order to access the Management Functions area.
5. **CUSTOMER TRANSACTIONS.** Summarizes the actions involved in typical customer transactions. In addition, the voice-enabled transactions feature is described.

CONTROL PANEL LAYOUT

The user interface of the terminal consists of the LCD screen, receipt chute, card reader, speaker, headphone jack (visually impaired), and 24 keys on three keypads. The Function keys are arranged in two four-key groups, one group on either side of the LCD display. The main keypad consists of 10 alphanumeric keys, two arrow keys and four large control keys, all located in a 16-key group beneath the LCD screen.

The main keypad and control keys have an integral raised Braille symbol to conform to the requirements of the Americans with Disabilities Act (Figure 2-1).



Figure 2-1. Control panel layout.

FUNCTION KEYPADS

The primary menu navigation keys, called Function keys, are arranged in two four-key groups, one group on either side of the LCD screen. A Function key is only active when a function or menu option name is displayed (if the display is “grayed out”, that option is not available). The Function keys are designated F1 through F8, as shown in Figure 2-2.



Figure 2-2. Function keys.

MAIN KEYPAD

The entry of numeric characters via the main keypad is straightforward: simply press the desired key. However, in certain Management Function screens it may be necessary to enter alphabetic characters, a procedure that requires a little more explanation. On such screens, a flashing cursor will be evident on the display, representing the location where the next character you enter will be displayed. To enter a letter or punctuation mark, you will first press the <CTRL> key (the blank key in the lower right-hand corner of the keypad), and then you will press the number that has the letter or other character you want.

Each of the numbered keys (<0> through <9>) has six characters available. See Table 2-1, Keypad characters. On most of these keys (<2> through <9>), the first three of the available characters are alphabetic, and are printed on the keycap above the number character. Two keys, the <0> and <1>, are different. The <0> key does not show any additional characters, while the <1> key shows two alphabetic characters ('QZ').

TABLE 2-1 - KEYPAD CHARACTERS						
	X1	X2	X3	X4	X5	X6
1	Q	Z	Space	~	!	@
2	A	B	C	#	\$	%
3	D	E	F	^	*	-
4	G	H	I	()	
5	J	K	L	\	/	"
6	M	N	O	;	:	Single Quote (Open)
7	P	R	S	?	<	>
8	T	U	V	[]	ñ
9	W	X	Y	{	}	Single Quote (Close)
0	,	.	-	&	=	+

Table 2-1. Keypad characters.

The first character on the first key (0-9) you press after the <CTRL> key will be displayed at the current cursor position. Pressing the same key repeatedly (X1-X6) will cycle the displayed letter through the available character choices for that key.

When the desired character is displayed, press the <RIGHT ARROW> key to 'lock it in' and move the cursor to the next position. Repeat these steps to enter the next character.

The <RIGHT ARROW> and <LEFT ARROW> keys are used in most alphanumeric data entry situations. The <LEFT ARROW> is used to back up and erase a character. The <RIGHT ARROW> is used to lock in a character. These keys will auto-repeat if held down for more than one second.

The <CLEAR> key can be used to clear an entry and start over. The <CANCEL> key will abort the current transaction.

MENU-BASED OPERATION

The terminal operates as a menu driven system. Messages and menu options presented on the LCD display screen guide the user's actions. The desired menu option is selected by pressing one of the keys located to the left and right of the display. For the purpose of security many screens timeout after a preset time interval, usually 30 seconds. The timeout length may vary depending on the function being performed.

When a screen timeout occurs, a screen is presented which asks the user if more time is needed. If the user chooses 'NO', the Customer Welcome screen will be presented. If 'YES' is chosen, the user is returned to the function that was active prior to the timeout. If the user does not make a selection within an additional 30-second countdown period the terminal will automatically go to the Customer Welcome screen.

When the unit is turned on, the unit will beep once and the Top menu, shown in Figure 2-3, will appear on the display screen after a few seconds. From the top menu, you can either:

1. Activate the terminal to perform customer transactions by pressing the key next to CUSTOMER TRANSACTIONS.
2. Enter the terminal system management area by pressing the key next to MANAGEMENT FUNCTIONS. **Note:** *You will have to enter an appropriate password to view the Management Functions menu.*

If you do not select a menu choice within 30 seconds the terminal will automatically default to the Customer Welcome screen (a benefit of this feature is that in the event of a power interruption the terminal will automatically begin accepting customer transactions shortly after power is restored).

CUSTOMER TRANSACTIONS

A customer begins a transaction by selecting a service from the Customer screen options. (PaySpot™, CashWorks™, Western Union® or ATM- Get Cash Now) They insert their ATM card into the card reader of the terminal. The card must be inserted so that the magnetic stripe can be scanned by the card reader's sensor. If the customer inserts the card incorrectly, a warning message will be displayed, accompanied by several beeps to get their attention.

If there is a problem reading a card, make sure the customer is inserting the card correctly. Most problems are the result of inserting the card incorrectly.

Once the card has been read in successfully, a surcharge message, if applicable, may be displayed (the surcharge message may be displayed at the end of the customer's transaction selection). The customer must then enter their secret Personal Identification Number (PIN) code. Once the PIN has been entered, the transaction type and account are selected, and the desired amount of the transaction, if needed. The transaction will be processed, typically in a matter of seconds.

Figure 2-3 shows how ATM transactions are handled. If the transaction was processed successfully, the customer is prompted to retrieve the requested cash (for withdrawal transactions) and/or the applicable transaction receipt, as needed. If the transaction was declined, a short receipt indicating the problem is printed.

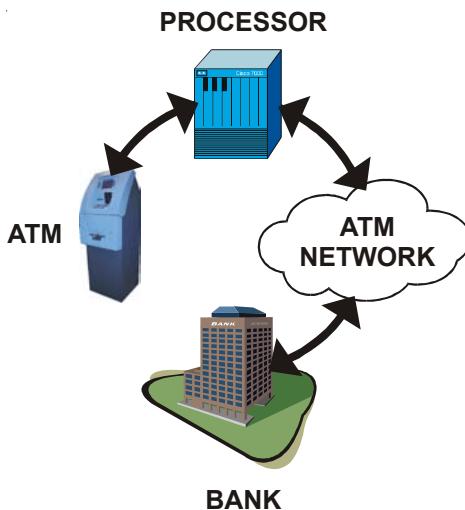


Figure 2-3. ATM transaction processing.

The ATM sends the customer transaction request to a processor. A processor is a financial intermediary, such as an Independent Sales Organization (ISO), bank, or other financial institution that provides transaction-processing services for ATMs. The ATM must be set up with a particular processor before customer transactions can take place.

The processor routes the transaction to the appropriate ATM network. An ATM network is a regionally or nationally organized clearing house for financial transactions, that deals directly with the appropriate financial institution, such as the customer's bank or credit card company, in order to complete the transaction. The processor will select the appropriate ATM network to use based on factors such as the type of ATM or credit card used, location of the customer's bank, or other considerations. The transaction may be transferred between several networks before ultimately reaching the customer's bank or credit card company.

The ATM network routes the transaction to the appropriate bank or other institution, confirms successful completion of the transaction, and sends a confirmation message back to the processor. If the request was for a cash withdrawal, an Electronic Funds Transfer (EFT) takes place to debit the funds (including any surcharge fee, if applicable) from the customer's bank account and credit the funds to the processor's bank account.

The processor forwards a confirmation message to the ATM (and an authorization to dispense currency, in the case of a cash withdrawal). The ATM dispenses the requested currency, if necessary, and provides the customer with a printed receipt as a record of the transaction.

The processor credits the merchant's account for the amount of any cash withdrawals (plus surcharge fees, if collected), typically by the end of the next business day.

VOICE-ENABLED TRANSACTIONS

The terminal provides voice feedback via an integrated output jack, enabling sight-impaired users to plug in a set of headphones and receive spoken instructions to assist them in using the ATM (Figure 2-4).

A raised symbol helps a user locate the headphone jack. The ATM will automatically detect when a headphone has been plugged into the jack, and will immediately switch into voice mode. Initially, a brief spoken tutorial will orientate the customer to the ATM control panel interface. Once the customer begins a transaction, spoken prompts will provide feedback and guide the customer through the successful accomplishment of the transaction.



Fig. 2-4. Headphone jack location.

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SECTION 3

MANAGEMENT FUNCTIONS



INTRODUCTION

This section describes the Management Functions available with the ‘MASTER’ password for accessing the ATM. When the Customer Welcome screen is displayed, you can access the Management Functions menu by following the procedure described next.

ACCESSING THE MANAGEMENT FUNCTIONS MENU

1. Press and hold down the <CTRL> key; while holding down the <CTRL> key, press the <1> key. Release both keys. After a moment the top menu will be displayed.
2. At the top menu, select **MANAGEMENT FUNCTIONS** by pressing the key next to Management Functions option.
3. Enter the user password at the password entry display.

Cassette Service

During the initial boot procedure, the terminal will force an **Error Code 156** to ensure the user enters the Cassette Setup functions to configure and put at least one cassette (cassette “A” for single cassette dispensers) **In Service**.

To access Management Functions, enter an appropriate password in the dialog box that appears when the Management Functions option is selected. The password can consist of up to 12 digits. Press the <Enter> button to accept the entry or <Cancel> to exit. When a valid password is entered, the Main menu screen will be displayed (Figure 3-1).

DEFAULT PASSWORDS

The default Master password is “**123456**” and the default Administrative password is “**987654**”.

If you use the same password for both the **MASTER** and **ADMINISTRATION** functions, **the ATM defaults to the ADMINISTRATION functions**, the lowest level options. The passwords can only be changed when the **MASTER** password is entered in the Management Functions, so **never** use the identical password for both **MASTER** and **ADMINISTRATION**.



Figure 3-1. Main menu screen.

NEW OR MODIFIED MANAGEMENT FUNCTIONS

The majority of the Management Functions are configured the same as before but they may have been relocated in the menu structure. A brief synopsis of each function is provided. A summary of the changes to the Management Functions is provided below:

- ☞ **MAIN MENU** - Three (3) major configuration paths now exist: Terminal, Services, and Processors. The other options (Cassette Service, Diagnostics, Close, and Journal) have moved slightly but their functions remain the same.
- ☞ **DIAGNOSTICS** - To reset an on-screen VEPP tamper error '205' or VEPP Serial number error '239', you must traverse through the Diagnostics menu items. A new option, "KEYPAD", allows user to clear either of these 2 error codes.
- ☞ **Key Management** - Two (2) passwords are now required before users can enter the PIN Master keys option. Once accessed, two (2) key parts (32 number/character stream) must be loaded, followed by a second part. The Check Digits are displayed before either accepting or declining. An on-screen keypad directs users for entering numbers and characters.
- ☞ **COMMUNICATION** - This menu item replaces the Telephone Configuration. TCP/IP configuration setup is now included with the modem setup.
- ☞ **TRITON CONNECT™** - Moved under "ATM Monitoring". TCP/IP configuration setup also included for Triton Connect. The communication type (dial-up or TCP/IP) is automatically detected.
- ☞ **CONFIGURE PROCESSORS** - Processor specific information is now configured under this option. You may configure up to four (4) processors and select which processor for individual WAVES services. Standard ATM cash transactions **WILL** use processor number one (**1**) as its default.
- ☞ **SURCHARGE** - You may now block up to one hundred (100) ISOs at the terminal.

MAIN MENU

ACCESS INSTRUCTIONS:

1. Access Management Functions by entering your password. The **MAIN MENU** screen will be displayed.



DESCRIPTION:

The **Main Menu** screen allows the service provider/terminal operator to access the following Management functions:

1. **Configure Terminal.** Used to configure operating parameters for the ATM terminal.
2. **Configure Services.** Used to select transaction types, account types, and surcharging setup.
3. **Configure Processors.** Used to configure up to four (4) Host/Processor specific parameters.

***Note: Configure Processors PRIOR to Configuring Services!**

4. **Cassette Service.** Allows the desired cassette(s) to be placed **IN SERVICE**.
5. **Diagnostics.** This function performs self-tests on the major components to help determine and isolate any malfunctions or errors.
6. **Close.** Used to perform Cassette Close, Day Close, Trial Close, and Schedule Close functions.
7. **Journal.** Journal data is imbedded in the dispenser firmware. The details of each transaction are stored in the journal's memory and can be retrieved at a later date. When needed, just the information desired can be recalled and a printout of the records made.

Note

In configuring the parameters, the availability of some options may be "grayed out" due to the specific dispensing mechanism installed or other features.

CONFIGURE TERMINAL

ACCESS INSTRUCTIONS:

1. From the **MAIN MENU** screen, select **CONFIGURE TERMINAL**.

DESCRIPTION:

The following options will be available from the **CONFIGURE TERMINAL** screen:

1. **Cassette Setup.** Allows the terminal operator to view and change cassette parameters.
2. **Date/Time Functions.** Provides a menu related to configuration of date and time parameters
3. **Language Idioma.** Provides access to the options that control the language that is displayed on the ATMs LCD display.
4. **Printer Settings.** Provides access to printer receipt length, low paper acknowledgment, and graphics.
5. **ATM Monitoring.** Allows Triton Connect™ setup and enabling, heart-beat messaging, and alarm thresholds.
6. **Password Maintenance.** Allows access to menus for viewing and changing the Master and Administrative passwords.
7. **More.** Additional options for couponing, messaging, etc. A listing of items are covered on the next page.



CONFIGURE TERMINAL (MORE)

1. **AD Screens.** This feature enables or disables the display on an idle terminal to alternate between the Welcome Screen and a screen containing graphics and text elements used to make an advertisement screen.
2. **Random/Level Prize Coupons.** Provides access to setup terminal operations for issuing printed and dispensed prize coupons.
3. **Change Messages.** Allows information for various terminal and receipt messages to be changed or authored.
4. **Communication.** Allows modem and/or TCP/IP parameters to be configured and tested.
5. **Adjust Contrast.** Adjusts the contrast of the display. ***Note: This function not available in Model 8100/9100 ATMs.**
6. **Local Zip Code.** Allows entry of the zip code where terminal is located.
7. **More.** Two (2) more additional options; Speech and View/Modify.
8. **Speech On/Off.** Enables/disables the voice-activated headphone jack.
9. **View/Modify Options.** Allows access for setting a selected feature.



CASSETTE SETUP

ACCESS INSTRUCTIONS:

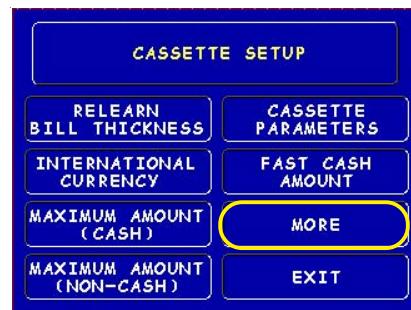
1. From the **MAIN MENU** screen, select **CONFIGURE TERMINAL**.
2. From the **CONFIGURE TERMINAL** screen, select **CASSETTE SETUP**.



DESCRIPTION:

The following options will be available from the **CASSETTE SETUP** screen:

1. **Relearn Bill Thickness.** Enables you to force the dispenser to enter the learning mode.
2. **International Currency.** Allows operator to select one of eleven (11) possible monetary symbols that describe the type of currency being used.
3. **Maximum Amount (Cash).** Allows operator to set the maximum amount withdrawal limit. The maximum amount cannot be more than fifty (50) times the denomination value in the cash dispenser.
4. **Maximum Amount (Non-Cash).** Allows operator to set maximum non-cash purchase limit for non-cash items. *** Note: This function available for multi-cassette units.**
5. **Cassette Parameters.** Used to perform cassette-specific configuration and setup operations.
6. **Fast Cash Amounts.** These amounts are entered by operator to prompt customer to select five (5) convenient amounts. The amounts must be even multiples of the denomination in the cassette.
7. **More: Low Currency.** Used to enable/disable low currency checking on the dispenser mechanism. ***Note: Available with units that have an SDD 1700 dispenser mechanism installed.**
8. **Extended Amount.** Extends the currency amount entry field from eight (8) digits to twelve (12) digits, if needed.



CASSETTE PARAMETERS

ACCESS INSTRUCTIONS:

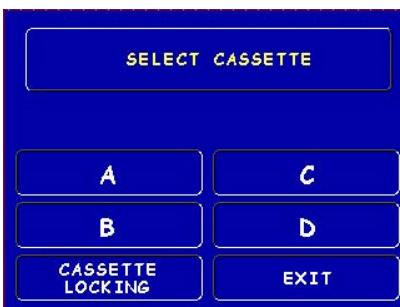
1. From the **CONFIGURE TERMINAL** screen, select **CASSETTE SETUP**.
2. From the **CASSETTE SETUP** screen, select **CASSETTE PARAMETERS**.
3. Select **CASSETTE "A", "B", or "C"** (cassette **"D"** will be grayed out).



DESCRIPTION:

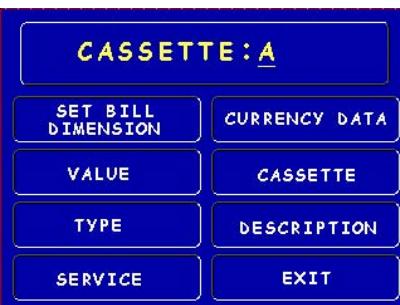
The following options will be available from the **CASSETTE SETUP** screen:

1. **Set Bill Dimensions.** *Note: Does not apply for TDM dispensers.*
2. **Value.** Allows the operator to set the value of a cash or non-cash item in a particular cassette. Value is the denomination of the currency or face value of the particular non-cash item.
3. **Type.** This describes the item in the particular cassette: "Cash" or "Non-Cash". Default is "Cash".
4. **Service.** This function displays the current cassette status and provides the option to place the cassette either **IN SERVICE** or **OUT OF SERVICE**.
5. **Currency Data.** *Note: Does not apply for TDM dispensers.*
6. **Cassette.** Allows you to select another cassette, if applicable.
7. **Description.** Provides access to menus that let the operator enter a brief description of **non-cash** only items in a cassette (**Multi-cassette use only**).



Note

- Cassette "A" is for single cassette dispensers.
- "CASSETTE LOCKING" feature does not apply to single cassette dispensers.



CONFIGURE PROCESSORS

ACCESS INSTRUCTIONS:

1. From the **MAIN MENU** screen, select **CONFIGURE PROCESSORS**.
2. From the **CONFIGURE PROCESSORS** screen, select option (1), (2), (3), or (4).



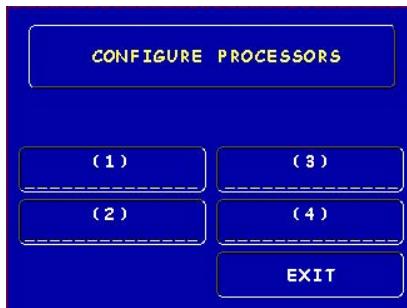
** Important **

Option (1) MUST be configured. It is the default processor for standard ATM transactions.

DESCRIPTION:

The following options will be available from the **CONFIGURE PROCESSORS** screen:

0. **Processor Name.** Allows entry for the name of the specified processor (Ex: CALYPSO)
1. **Terminal ID.** Allows entry of the terminal ID assigned by the host processor.
2. **Key Management.** Allows entry of the PIN Master key(s) assigned by the host processor.
3. **Communication Type.** Allows user to toggle between the communication type the terminal is using (Dial-up, TCP/IP). **Note: Model 8100 detects the communication type installed and will not allow user to change (toggle).**
4. **Communication Numbers.** Allows entry of the host processors primary and backup (if needed) phone numbers or the Host TCP/IP Addresses if running TCP/IP communication type.



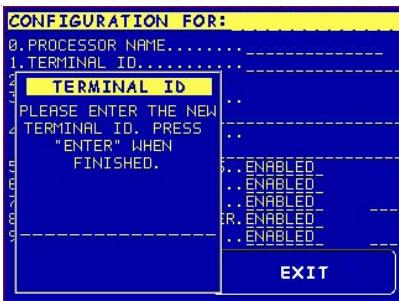
Option 0 - Processor Name

CONFIGURE PROCESSORS

The remaining options are toggled to either **Enable** or **Disable** that particular function.

5. **Send Terminal Totals.** When this option is Enabled, the terminal will send accumulated totals information to the processor during the close operation.
6. **Status Monitoring.** Status monitoring is a feature available with selected processor software. When Enabled, the terminal will send operational status information to the processor. The status information is sent in a data field that is part of any of the following messages:
 - A transaction request message.
 - Comms key download.
 - Host totals download request.
 - Reversal request message.

7. **EOT (End Of Transmission).** When this option is Disabled, the terminal will not look for the EOT character at the conclusion of the transaction. Contact your host processor to verify before Enabling. This option is processor-specific.



Option 1. Terminal ID



Option 2. Key Management



Option 4. Communication Numbers



Options 5-9. Toggled (Enable/Disable)

CONFIGURE PROCESSORS

8. **Communications Header.** This optional feature is only applicable to certain processors. When required, it must be Enabled and have the correct data in the header data field. The Communication Header consists of alphanumeric characters.



Warning

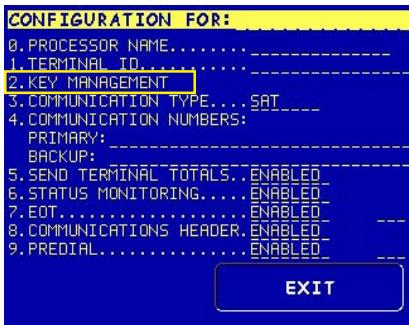
Enabling the COMMUNICATION HEADER when using a processor that doesn't use this feature will prevent any type of transaction from completing. Disabling or having incorrect data in the COMMUNICATION HEADER data field (if the feature is required) will also prevent any type of transaction from processing

9. **Predial.** When this feature is Enabled, the terminal will dial out to the processor and establish a connection as soon as the customer's ATM or credit card has been scanned by the card reader.

KEY MANAGEMENT

ACCESS INSTRUCTIONS:

1. From the **MAIN MENU** screen, select **CONFIGURE PROCESSORS**.
2. From the **CONFIGURE PROCESSORS** screen, select option **(2)** for **KEY MANAGEMENT**.



DESCRIPTION:

The **KEY MANAGEMENT** function provides access to the ATMs functions that control the method of entry for MAC Master Keys and/or PIN Master Keys, downloading the PIN Working Keys, and displaying the Check Digits. The new VEPP requires that two key parts for each key are loaded. After this screen will be a screen to indicate that the second part must be entered. Then the “**Enter**” function key will be displayed to load the second key part. After the second key part is loaded, the terminal will prompt if any additional key parts need to be loaded.

* Important*

Before proceeding, check to ensure there are no VEPP Tamper (EC 205) or VEPP Serial Number (EC 239) errors. **You must clear these errors first!** To check/clear the errors, enter **MANAGEMENT FUNCTIONS > DIAGNOSTICS > MORE DIAGNOSTICS > MORE (MORE) DIAGNOSTICS > KEYPAD**. Failure to clear these errors first will decline entry of DES keys.

The following sequence will be displayed from the **KEY MANAGEMENT** screen:

1. **Enter Master Keys** - Select this option to enter the encryption keys.

Download Working Keys - Select this option to download the Working Keys. (**Must** be selected after entering PIN and/or MAC Master keys)

Check Digits - Displays encryption key check digits.



MANAGEMENT FUNCTIONS

2. **Password Required** - When "Enter Master Keys" is selected, you will be prompted to enter two (2) passwords. If this is an initial setup, the default password is **six (6) zeros (000000)** for each. You will then be prompted to change passwords. Passwords **MUST** be changed!



3. **Change Password (Initial Setup)** - The VEPP requires that no default password can be entered. If a user enters the default password, the VEPP will force the user to change them before they can enter keys.



4. **Change User Passwords (cont)** - This screen allows the user(s) to select which password to change. If any password is the default value, the VEPP will only allow these two functions to be selected.



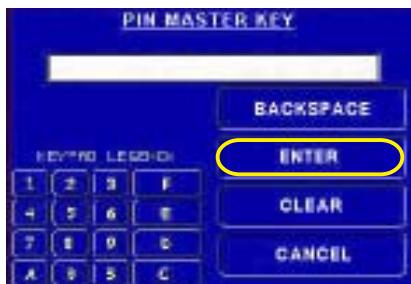
5. **Change User Passwords (cont)** - If this is an initial setup, the current password will be six (6) zeros (000000). Enter a new password (twice). A password consists of six (6) numbers, no characters. A screen prompt will appear if the passwords were changed successfully. **DO NOT** use weak passwords (Ex: 111111,123456)



6. **Enter Master Keys** - This screen allows selection to enter the Master keys. You **MUST** enter PIN Master keys. DO NOT enter keys in the MAC Master keys unless processor directs. You **MUST** enter two (2) sets of keys (32 alpha/numerical).



7. **Enter Keys** - Enter the first (32) alpha/numerical key. The on-screen keypad legend describes the ATMs keypad for entering numbers and characters. Select “ENTER” using the display function key.



8. **Check Digits** - After selecting “Enter” from previous screen, you will get the Check Digit which you can either Accept or Decline. When you “Accept” the key check digit, enter the second key. After accepting the second key part, you will be prompted “Another Key Part”. Select “Yes” if a third key is needed or “No” if none.



9. **Download Working Keys** - After entering the keys, exit out to the Key Management Main screen and Download Working Keys. You **MUST** download the Working keys from the processor.



CONFIGURE SERVICES

ACCESS INSTRUCTIONS:

1. From the **MAIN MENU** screen, select **CONFIGURE SERVICES**.

DESCRIPTION:

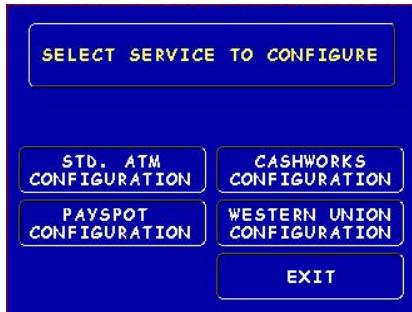
The following options will be available from the **Configure Services** screen:



Note

Any service-specific functions (PaySpot, CashWorks, Western Union) must have a processor selected for their specific service, if used.

STD ATM Configuration uses the default processor number one (1). You **MUST** configure processor number (1) for standard terminal operations.

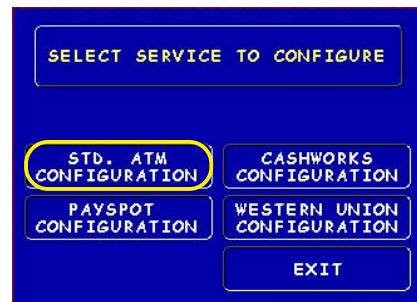


1. **STD ATM Configuration.** This option allows configuration of the types of services for normal customer transactions.
2. **PaySpot Configuration.** This option allows configuration of cellular and long-distance services.
3. **CashWorks Configuration.** This option allows configuration of maximum check cashing amounts.
4. **Western Union Configuration.** This option allows configuration of note denominations loaded in the dispenser mechanism and account types.

STD ATM CONFIGURATION

ACCESS INSTRUCTIONS:

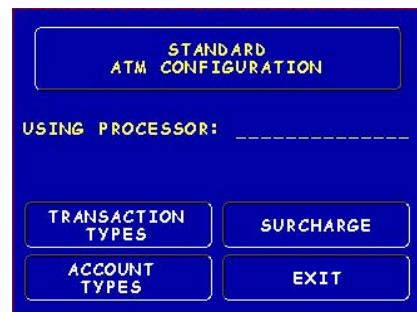
1. From the **MAIN MENU** screen, select **CONFIGURE SERVICES**.
2. From the **CONFIGURE SERVICES** screen, select **Std. ATM CONFIGURATION**.



DESCRIPTION:

The following options will be available from the **STANDARD ATM CONFIGURATION** screen:

1. **Transaction Types.** This function allows turning **ON** or **OFF** the availability of two (2) transaction types: **Transfers** and **Balance Inquiries**. It also allows prompting the customer on balance inquiries.
2. **Account Types.** Allows turning **ON** or **OFF** the availability of two (2) account types: **Savings** and **Credit Card**.
3. **Surcharge.** This function allows operator to set surcharging configurations.

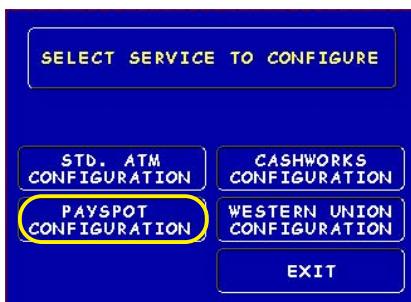


Note
The Using Processor defaults to processor number one (1) in the Configure Processor setup. You can not change the processor.

PAYSPOT CONFIGURATION

ACCESS INSTRUCTIONS:

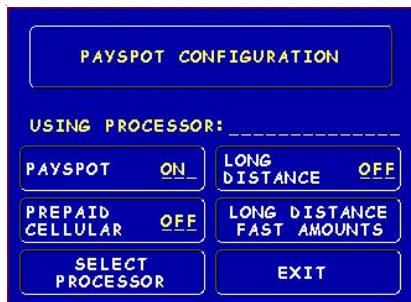
1. From the **MAIN MENU** screen, select **CONFIGURE SERVICES**.
2. From the **CONFIGURE SERVICES** screen, select **PAYSPOT CONFIGURATION**.



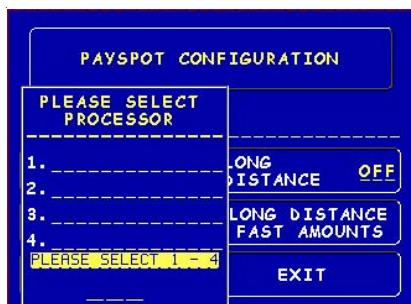
DESCRIPTION:

The following options will be available from the **PAYSPOT CONFIGURATION screen**:

1. **PaySpot On/Off.** This function enables or disables PaySpot as an option to customers. When disabled, no display will be advertised on the Customer screen.
2. **Prepaid Cellular On/Off.** Enables or disables wireless phone recharge as an option to customers.
3. **Select Processor.** This function provides selection of the specified host processor for PaySpot transactions. When a processor is selected, it automatically “moves” the selection to the USING PROCESSOR line.
4. **Long Distance On/Off.** Enables or disables long-distance minute recharges as an option to customers.
5. **Long Distance Fast Amounts.** Allows operator to set convenient amounts for long-distance minutes.



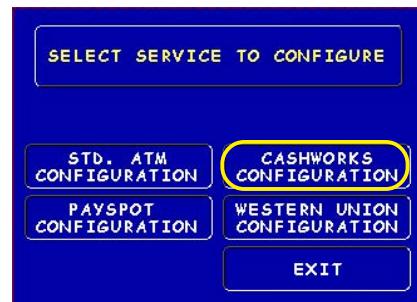
***Note: The specified processor must be configured in the Configured Processor setup.**



CASHWORKS CONFIGURATION

ACCESS INSTRUCTIONS:

1. From the **MAIN MENU** screen, select **CONFIGURE SERVICES**.
2. From the **CONFIGURE SERVICES** screen, select **CASHWORKS CONFIGURATION**.



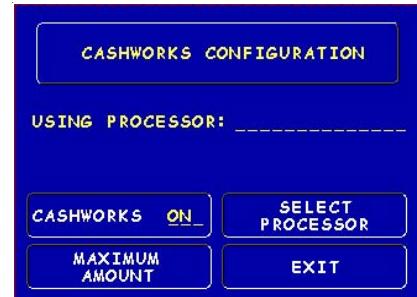
DESCRIPTION:

The following options will be available from the **CASHWORKS CONFIGURATION** screen:

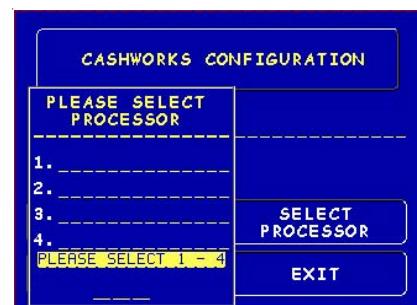
1. **CashWorks On/Off.** This function enables or disables CashWorks as an option to customers. When disabled, no display will be advertised on the Customer screen.
2. **Maximum Amount.** This function allows the operator to set the value limit for check cashing. This number is the largest dollar amount allowed for withdrawal transaction. The value **MUST** be an even multiple of the denomination in the cassette.

***Note: If no value is entered and default left to “\$0.00”, CashWorks will authorize a check transaction for up to \$100,000. ENTER AN AMOUNT!**

3. **Select Processor.** This function provides selection of the specified host processor for CashWorks transactions. When a processor is selected, it automatically “moves” the selection to the USING PROCESSOR line.



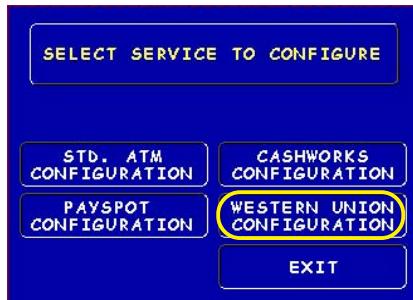
***Note: The specified processor must be configured in the Configured Processor setup.**



WESTERN UNION CONFIGURATION

ACCESS INSTRUCTIONS:

1. From the **MAIN MENU** screen, select **CONFIGURE SERVICES**.
2. From the **CONFIGURE SERVICES** screen, select **WESTERN UNION CONFIGURATION**.



DESCRIPTION:

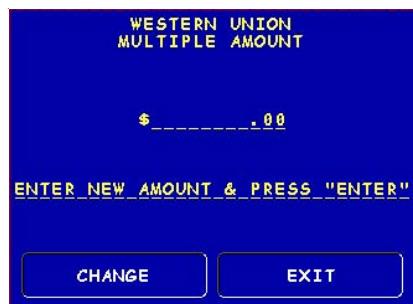
The following options will be available from the **WESTERN UNION CONFIGURATION**:

1. **Western Union On/Off.** This function enables or disables Western Union as an option to customers. When disabled, no display will be advertised on the Customer screen.



2. **Multiple Amount.** This function allows the operator to set the value of the denomination inside the cassette. It must be a whole number, no cents.

***Note: The default value is '\$20.00'.**

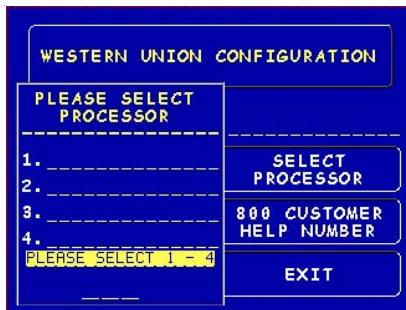


3. **Account Types.** This function allows operator to enable or disable Saving Accounts as an option to customers. **Checking Accounts** are the default account and will be displayed to their customers.



WESTERN UNION CONFIGURATION

4. **Select Processor.** This function provides selection of the specified host processor for Western Union transactions. When a processor is selected, it automatically “moves” the selection to the USING PROCESSOR line.
5. **800 Customer Help Number.** Western Union has an (800) number available for 24 hour assistance. The default number is 1-877-982-8286. The operator may change the number with this option.



*Note: The specified processor must be configured in the Configured Processor setup.



CASSETTE SERVICE

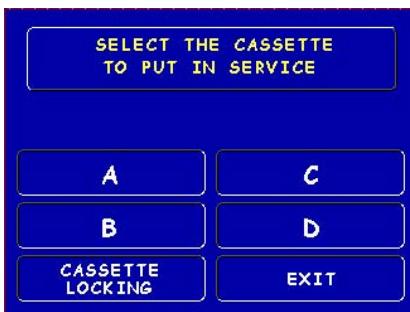
ACCESS INSTRUCTIONS:

1. From the **MAIN MENU** screen, select **CASSETTE SERVICE**.

DESCRIPTION:

The **CASSETTE SERVICE** function allows the operator to put the selected cassette(s) “In Service” or “Out of Service”. This function can also be used to clear **Error Code 156**, Cassette Out of Service.

Note: For single cassette dispensers, cassette “A” **MUST** be In Service.



DIAGNOSTICS

ACCESS INSTRUCTIONS:

1. From the **MAIN MENU** screen, select **DIAGNOSTICS**.

DESCRIPTION:

The following options will be available from the **Diagnostics** screen:

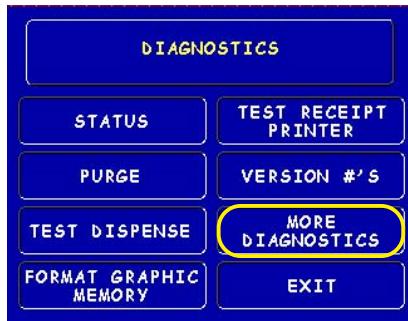


1. **Status.** This function presents the status checks on the primary functional areas of the dispensing mechanism.
2. **Purge.** This function instructs the dispenser to remove all documents from the feed path. The return code for a successful purge in a single cassette dispenser is '20 20 20'. The return code for a multi-cassette dispenser is '0'.
3. **Test Dispense.** This function instructs the dispensing mechanism to dispense one (1) note from the cassette into the reject cassette/vault/compartment. A return code in a single cassette dispenser of '20 1 0 0 0' indicates a successful test dispense (20) and (1) note picked from cassette A.
4. **Format Graphic Memory.** This function erases the memory used to store AD graphics. AD graphics can then be downloaded from a local terminal or through Triton Connect.
5. **Test Receipt Printer.** This function tests the operation of the receipt printer and prints out configuration parameters, processor setup, etc, that may be used to verify terminal setup.
6. **Version #'s.** This function displays the version numbers of the terminal operating software.
7. **More Diagnostics.** Accesses additional diagnostic functions.

MORE DIAGNOSTICS

ACCESS INSTRUCTIONS:

1. From the **MAIN MENU** screen, select **DIAGNOSTICS**.
2. From the **DIAGNOSTICS** screen, select **MORE DIAGNOSTICS**.



DESCRIPTION:

The **MORE DIAGNOSTICS** menu allows the terminal operator to perform the following functions:

1. **Inject New Cassette ID.** This function enables the user to change the identification code of a cassette. **Note: For multi-cassette dispensers only.*
2. **Communication.** This function performs a function test of the modem or TCP/IP hardware. This does not test the ability of the modem or TCP/IP device to communicate with the phone/data line.
3. **MODEM SPEAKER ON/OFF.** Allows speaker sound on or off.
4. **FORCE UNLOCK.** This function provides a means of overriding the unlocking mechanism associated with a particular cassette. It is to be used immediately after failure of a normal cassette unlock operation. **Note: For multi-cassette dispensers only.*
5. **PRINT DISPENSER STATUS.** This function prints the “TDM Status” report. This report provides useful information that can assist a service technician. **Note: Available when a TDM dispensing mechanism is installed.*
6. **CLEAR DISPENSER STATUS.** This function resets the count in the “Since Reset” column on the dispenser data report. **Note: Available when a TDM dispensing mechanism is installed.*
7. **MORE DIAGNOSTICS.** Accesses additional diagnostic functions.
8. **PREVIOUS.** Returns user to main diagnostics screen.



MORE (MORE) DIAGNOSTICS

ACCESS INSTRUCTIONS:

1. From the **MAIN MENU** screen, select **DIAGNOSTICS**.
2. From the **DIAGNOSTICS** screen, select **MORE DIAGNOSTICS**, then select **MORE DIAGNOSTICS** again.



DESCRIPTION:

The **MORE (MORE) DIAGNOSTICS** menu allows the terminal operator to perform the following functions:

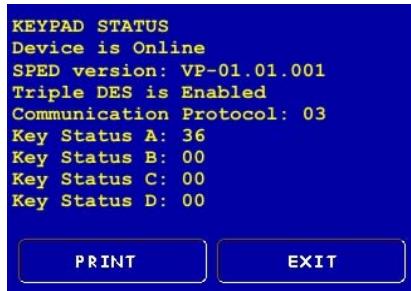
Note: VEPP errors **MUST** be cleared before attempting to enter Master keys.

1. **Keypad.** This function enables the user to reset VEPP errors that appear on the terminal screen (**Error Code (EC) 205 and/or 239**). It also provides a status of the VEPP device which can be printed.
2. **Clear Tamper.** Allows user to reset a tamper condition if exists (**EC-205**).
3. **Clear Serial Tamper.** Allows user to reset a serial number tamper condition if exists (**EC-239**).
4. **Status.** Allows user to view/print the VEPP device status.



Key Status A-D refers to multi-host processors key information.

KEY STATUS	
00	No Keys Loaded
02	PIN Master Key Loaded
03	PIN Master/MAC Master Keys Loaded
14	PIN Master Key Loaded PIN Working Key Downloaded
36	PIN Master/MAC Master Keys Loaded PIN Working/MAC Working Keys Downloaded



2. **Scan Card.** Enables testing an ATM or credit card for proper operation in the terminal card reader.

CLOSE

ACCESS INSTRUCTIONS:

1. From the **MAIN MENU** screen, select **CLOSE**.

DESCRIPTION:

The following options will be available from the **CLOSE** screen:



1. **Schedule Close.** This function allows you to turn **ON/OFF** the schedule close feature. It also provides access to specify the time of day when a **Day Close** process is initiated.
2. **Trial Close.** This function is used to get the totals from the ATM. It prints information from the processor and the terminal itself. It functions like a **Day Close** except the totals are not cleared.
3. **Day Close.** This function is used to complete daily balancing of the ATM with the processor. The printed information includes a total of all transactions. The totals are cleared and switched to the next business day.
4. **Trial Cassette Close (All).** This function prints a receipt summarizing activity on all cassettes since the last **Cassette Close** was performed. The totals are not cleared or reported to the processor.
5. **Cassette Close.** This function is used to access menu options for cassette close and replenishment actions.

CASSETTE CLOSE

ACCESS INSTRUCTIONS:

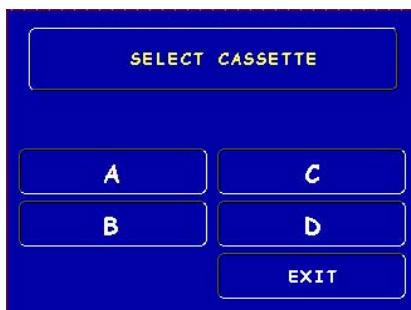
1. From the **MAIN MENU** screen, select **CLOSE**.
2. From the **CLOSE** screen, select **CASSETTE CLOSE**.

DESCRIPTION:

The following options will be available from the **CASSETTE CLOSE** screen:

Select Cassette. This option allows the operator to select cassette-specific close operations. **Note:** Single cassette dispensers use cassette "A".

1. **Trial Cassette Close.** Prints a receipt summarizing activity on the selected cassette since the last Cassette Close was performed (Totals are not cleared or reported to the host).
2. **Cassette Close.** This function is used to complete the balancing of the specified cassette. It prints a report summarizing all activity on the selected cassette since the last **Cassette Close** and clears the totals. It also resets the number of bills in the cassette to zero (**0**).
3. **Select Cassette.** Allows operator to switch between cassettes when performing cassette close operations.
4. **Enter Qty. in Cassette.** This option allows entry of the number of notes/documents in the cassette. This number is used as the starting point for the cassette close report. ***Note:** Enter the total number of notes/documents placed in the cassette, NOT the value of the documents.



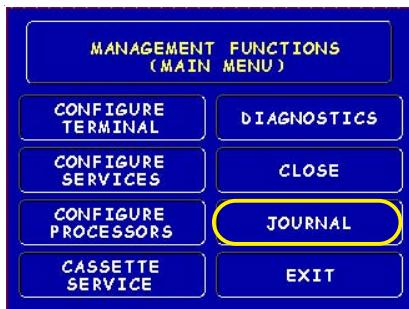
JOURNAL

ACCESS INSTRUCTIONS:

1. From the **MAIN MENU** screen, select **JOURNAL**.

DESCRIPTION:

The following options will be available from the **JOURNAL** screen:



1. **Print Journal.** This function is used to automatically print out any journal entries collected since the last time the journal was printed. All unaudited records are printed and marked as audited.
2. **Clear Journal.** This function is used to mark all unprinted records as audited. They will not be printed out when a Print Journal command is performed.
3. **Print Last X Entries.** This function is used to retrieve audited and unaudited records from the journal, either before or after they have been Printed or Cleared.



Note

The Electronic Journals buffer can store up to 2045 entries. You may retrieve the last 2045 entries using the Print Last X command. The TDM dispenser mechanisms in the Model 8100/9100 have an imbedded memory chip that holds the journal entries.

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TCP/IP (ETHERNET) CONFIGURATION

INTRODUCTION (TCP/IP ETHERNET)

This section will discuss the TCP/IP Ethernet-specific Management Functions. The Ethernet hardware should be previously installed. In the 8100/9100 models, only one communication type is allowed for all hosts.

TCP/IP ADDRESSES

The Ethernet-equipped ATM communicates using Transmission Control Protocol (TCP) and Internet Protocol (IP), allowing it to send and receive information in the form of small packets of digital data. In order to configure the ATM to correctly access the host network using this protocol, IP addresses must be entered into the appropriate ATM setup functions. The Addresses are the **Host TCP/IP**, **TERMINAL IP**, **SUBNET MASK**, **GATEWAY**, and **LISTENING PORT**.

The addresses are attached to the data packet that is being sent; the **Host TCP/IP** address allows the data packet to be routed through the TCP/IP Ethernet network, ultimately to be received and processed by the host server on the network. The **TERMINAL IP** address identifies the ATM as the source of the data packet, and is used by the host server to return acknowledgements, transaction approvals, or other data to the ATM. Alongside the addresses, each port requires a **SUBNET MASK**.

This part of the IP address distinguishes other machines on the same LAN from machines in other departments or elsewhere in the world. For direct access to networks beyond the current one, each machine must be told the IP addresses of the router (or **GATEWAY**) that connects the local network with the wider world. The **LISTENING PORT** value identifies the data being sent to that specific machine. The **MAC ADDRESS** is assigned from the iChip manufacturer. The **CHIP VERSION** indicates the chip family, software version, and boot block revision in the Ethernet device only. **TCP/IP TIMEOUT** is the time that the terminal will wait from the message to be sent to the host and the time it takes for the host to respond.

If Triton Connect ATM monitoring software is being used, the applicable IP addresses for the Triton Connect host computer and Alarm Monitoring feature must also be entered.

The descriptions on the following pages will cover how to access the appropriate functions and initially enter the IP addresses and any other TCP/IP Ethernet operating parameters or diagnostics.

CONFIGURE PROCESSORS COMMUNICATION TYPE

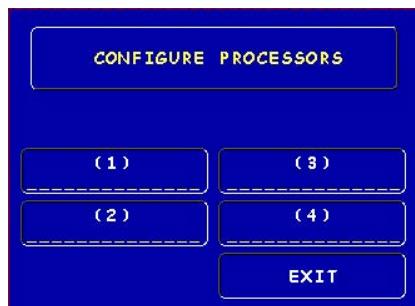
ACCESS INSTRUCTIONS:

1. From the **MAIN MENU** screen, select **CONFIGURE PROCESSORS**.
2. From the **CONFIGURE PROCESSORS** screen, select option **(1)**, **(2)**, **(3)**, or **(4)**.
3. From the **CONFIGURATION FOR:** menu screen, select option **(3)**.



** Important**

Option (1) MUST be configured. It is the default processor for standard ATM transactions.



DESCRIPTION:

The **COMMUNICATION Type** function allows user to toggle between the communication type the terminal is using. You can select either Dialup, Wireless, or TCP/IP. **The External Ethernet option must be installed to select.**

Note: (Model 8100/9100 ATMs)

This function detects the communication type installed and **WILL NOT** allow user to change (toggle). It also sets the communication type for Triton Connect



COMMUNICATION NUMBERS

ACCESS INSTRUCTIONS:

1. From the **MAIN MENU** screen, select **CONFIGURE PROCESSORS**.
2. From the **CONFIGURE PROCESSORS** screen, select option (1), (2), (3), or (4).
3. From the **CONFIGURATION FOR:** menu screen, select option (4).



DESCRIPTION:

The **COMMUNICATION Numbers** function allows entry of the host processors primary and backup (if needed) phone numbers or the **Host TCP/IP Addresses** if running TCP/IP communications type.

The **Host TCP/IP Addresses** are provided by your host Network Administrator. The first part of the address consists of a sequence of four groups of numbers. Each group can be up to three digits long, and each group is separated by a period (dot character), as in this example: **123.3.01.99** The second part of the address is a **PORT NUMBER**, consisting of five (5) digits or less, separated from the first part by a comma (‘,’) character, as in this example: **123.3.01.99,23353**.

Follow these steps to initially enter or change the **PRIMARY Host TCP/IP ADDRESS**:

- ☛ Select which host address you want to enter/change (Primary/Backup).
- ☛ Enter the first group of numbers in the IP Address using the main keypad keys.
- ☛ Enter a ‘dot’ character by pressing the <Control> key, then the <0> key Twice to select the period’, then the <Right Arrow> key to lock it in.
- ☛ Repeat Steps 2 and 3 for the second and third group of numbers in the IP Address.
- ☛ Enter the fourth group of numbers in the IP Address.
- ☛ Enter the comma (“,”) character by pressing the <Control> key, then the <0> key Once to select the comma. Press the <Right Arrow> key to lock it in.
- ☛ Enter the **PORT NUMBER**. Select <Enter> to save the Host /IP Address entry, or <Cancel> to discard the changes. Repeat steps for **BACKUP Host TCP/IP ADDRESS** entry.

CONFIGURE TERMINAL TCP/IP CONFIGURATION

ACCESS INSTRUCTIONS:

1. From the **MAIN MENU** screen, select **CONFIGURE TERMINAL**.
2. From the **CONFIGURE TERMINAL** screen, select **MORE**.
3. From the **MORE** screen, select **COMMUNICATION**.
4. From the **COMMUNICATION** screen, select **TCP/IP CONFIGURATION**.

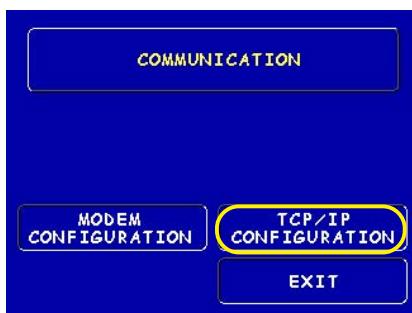


DESCRIPTION:

The **TCP/IP CONFIGURATION** option allows access to setup parameters that control communication between the ATM and the Host Network. It also allows testing of the External Ethernet device.

The following parameters are accessed through this function and described on the following pages:

- ⇒ **NETWORK SETTINGS**
- ⇒ **TEST TCP/IP**



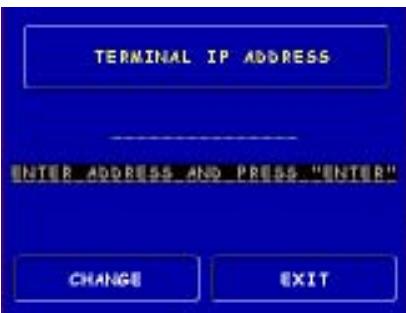
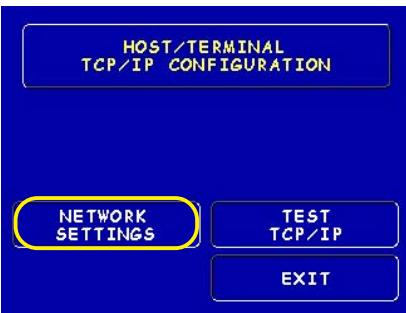
NETWORK SETTINGS

Description:

The **NETWORK SETTINGS** parameters are provided by your host Network Administrator. The **TERMINAL IP ADDRESS**, **SUBNET MASK**, and **GATEWAY ADDRESS** consist of a sequence of four groups of numbers. Each group can be up to three digits long and each group is separated by a period (dot character), as in this example: **123.3.01.99**

Follow these steps to initially enter or change the **TERMINAL IP ADDRESS**, **SUBNET MASK**, and **GATEWAY ADDRESS**:

- Select <Change> to blank the current entry, if necessary.
- Enter the first group of numbers in the Address/Value using the main keypad keys.
- Enter a ‘dot’ character by pressing the <Control> key, then the <0> key Twice to select the period’, then the <Right Arrow> key to lock it in.
- Repeat Steps 2 and 3 for the second and third group of numbers for the Address/Value.
- Enter the fourth group of numbers for the Address/Value.
- Select <Enter> to save the Address/Value entry or <Cancel> to discard the changes.



NETWORK SETTINGS

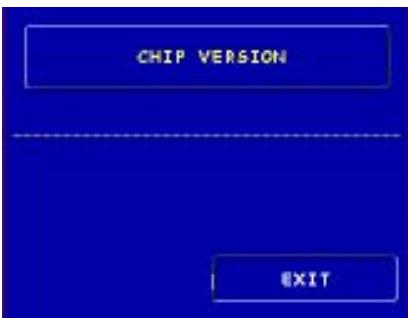
The **CHIP VERSION** and **MAC ADDRESS** are reference parameters ONLY - no configuring is done. The Chip Version is the software version running on the ATM and the MAC Address is hard-coded from the Ethernet device.

The **TCP/IP TIMEOUT** is defaulted to 120 seconds, but may be increased or decreased depending on response time. Maximum timeout value is 999 seconds.

The **LISTENING PORT** value consists of five (**5**) digits or less.

Follow the steps below to initially enter or change the **LISTENING PORT**:

- Select <Change> to blank the current entry, if necessary.
- Enter the **LISTENING PORT** number. Select <Enter> to save the Port entry or <Cancel> to discard the changes.



TEST TCP/IP

DESCRIPTION:

This option allows testing of the TCP/IP device. When selected, the Ethernet PCB assembly initializes and resets the configuration hardware imbedded in the device. If test is successful, a "Tested OK" will be displayed.

HOST/TERMINAL
TCP/IP CONFIGURATION

NETWORK
SETTINGS

TEST
TCP/IP

EXIT

ERROR CONDITION:

If the test fails, an error message will be displayed. Check the cable connections from the External Ethernet device to the Main board. Possible problems could be no or incorrect voltage to unit, IF/Host cable, Main board, or Ethernet PCB assembly.

Error Code 237 may appear during operation. This code means there is a TCP/IP failure.

RESETTING AND TESTING
TCP/IP DEVICE

PLEASE WAIT

TCP/IP DEVICE
TESTED OK

PRESS CANCEL TO CONTINUE

TCP/IP DEVICE
FAILED

PRESS CANCEL TO CONTINUE

TRITON CONNECT TCP/IP CONFIGURATION

ACCESS INSTRUCTIONS:

1. From the **MAIN MENU** screen, select **CONFIGURE TERMINAL**.
2. From the **CONFIGURE TERMINAL** screen, select **ATM MONITORING**.
3. From the **ATM MONITORING** screen, select **TRITON CONNECT**.
4. From the **TRITON CONNECT** screen, select **TCP/IP CONFIGURATION**.

**** Important ****
If using, turn Triton Connect <ON> after entering the Configuration parameters.



DESCRIPTION:

The **TRITON CONNECT** function allows the terminal operator to set up parameters that control DIAL-UP and **TCP/IP** communications between the ATM and Triton Connect PC-based software to remotely manage your Triton Systems ATMs. The following **TCP/IP** parameters are accessed through this function and described on the following pages:



- **Host Numbers**
- **Alarm Numbers**
- **TCP/IP Configuration**

Note: Comms Type Option

You must have the External Ethernet device installed. For **Model 8100/9100** ATMs, this function detects the communication type installed (Dialup or **TCP/IP**) and will not allow user to change (toggle).



TRITON CONNECT HOST NUMBERS

DESCRIPTION:

The **HOST NUMBERS** are provided by your Processor/Host Network administrator. If you are using **TCP/IP** as your communication type, you will need to enter **HOST TCP/IP ADDRESSES**.

The first part of the address consists of a sequence of four groups of numbers. Each group can be up to three digits long, and each group is separated by a period (dot character), as in this example: **123.3.01.99** The second part of the address is a **PORT NUMBER**, consisting of four (4) digits or less, separated from the first part by a comma (",") character, as in this example: **123.3.01.99,9043**.

Follow these steps to initially enter or change the **PRIMARY HOST NUMBER (ADDRESS)**:

- Select <Change> to blank the current entry, if necessary.
- Enter the first group of numbers in the TCP/IP Address using the main keypad keys.
- Enter a ‘dot’ character by pressing the <Control> key, then the <0> key Twice to select the period’, then the <Right Arrow>key to lock it in.
- Repeat Steps 2 and 3 for the second and third group of numbers in the TCP/ IP Address.
- Enter the fourth group of numbers in the TCP/IP Address.
- Enter the comma (",") character by pressing the <Control> key, then the <0> key Once to select the comma. Press the <Right Arrow> key to lock it in.
- Enter the **PORT NUMBER**. Select <Enter> to save the Primary TCP/IP Address entry or <Cancel> to discard the changes. Repeat steps for **BACKUP HOST NUMBER (ADDRESS)** entry.



TRITON CONNECT ALARM NUMBERS

DESCRIPTION:

The **ALARM NUMBERS** are provided by your Processor/Host Network Administrator. If you are using **TCP/IP** as your communication type, you will need to enter **ALARM TCP/IP ADDRESSES**. The first part of the address consists of a sequence of four groups of numbers. Each group can be up to three digits long, and each group is separated by a period (dot character), as in this example: **123.3.01.99** The second part of the address is a Port Number, consisting of four (4) digits or less, separated from the first part by a comma (",") character, as in this example: **123.3.01.99,9043**.

Follow these steps to initially enter or change the **PRIMARY ALARM NUMBER (ADDRESS)**:

- ➊ Select <Change> to blank the current entry, if necessary.
- ➋ Enter the first group of numbers in the TCP/IP Address using the main keypad keys.
- ➌ Enter a ‘dot’ character by pressing the <Control> key, then the <0> key Twice to select the period’, then the <Right Arrow> key to lock it in.
- ➍ Repeat Steps 2 and 3 for the second and third group of numbers in the TCP/IP Address.
- ➎ Enter the fourth group of numbers in the TCP/IP Address.
- ➏ Enter the comma (",") character by pressing the <Control> key, then the <0> key Once to select the comma. Press the <Right Arrow> key to lock it in.
- ➐ Enter the **PORT NUMBER**. Select <Enter> to save the Primary Alarm TCP/IP Address entry or <Cancel> to discard the changes. Repeat steps for **BACKUP ALARM NUMBER (ADDRESS)** entry.



TRITON CONNECT TCP/IP CONFIGURATION

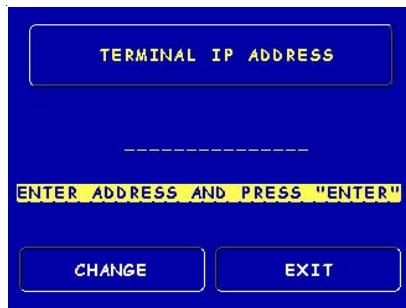
DESCRIPTION:

The **TERMINAL IP** and **LISTENING PORT ADDRESSES** are provided by your Host Network Administrator. The Terminal Address consists of a sequence of four groups of numbers. Each group can be up to three digits long, and each group is separated by a period (dot character), as in this example: **123.3.01.99**

The Listening Port value consists of five (**5**) digits or less.

Follow these steps to initially enter or change the **TERMINAL IP ADDRESS** and **LISTENING PORT** values:

- ➊ **(TERMINAL IP ADDRESS)** Select <Change> to blank the current entry, if necessary.
- ➋ Enter the first group of numbers in the IP Address using the main keypad keys.
- ➌ Enter a ‘dot’ character by pressing the <Control> key, then the <0> key **Twice** to select the period’, then the <Right Arrow> key to lock it in.
- ➍ Repeat Steps 2 and 3 for the second and third group of numbers in the IP Address.
- ➎ Enter the fourth group of numbers in the IP Address. Select <Enter> to save the Terminal IP Address entry or <Cancel> to discard the changes.
- ➏ **(LISTENING PORT)** Select <Change> to blank the current entry, if necessary.
- ➐ Enter the Listening Port number. Select <Enter> to save the Port Address entry or <Cancel> to discard the changes.



CDMA (WIRELESS) CONFIGURATION

INTRODUCTION (WIRELESS)

This section will discuss the CDMA (Wireless) configurations. The CDMA modem hardware should be installed. In the 8100/9100 models, only one communication type is allowed for all hosts.

CHANGES

There is functionality in the terminal software that makes reference to TCP/IP but is actually dealing with the Ethernet “hardware” which happens to use TCP/IP as its communication protocol. Wireless modems will use TCP/IP communication protocol. To eliminate confusion between what is considered hardware and the communications protocol, there will be several locations where the text will change from “TCP/IP” to “Ethernet”.

TCP/IP ADDRESSES

The Ethernet-equipped ATM communicates using Transmission Control Protocol (TCP) and Internet Protocol (IP), allowing it to send and receive information in the form of small packets of digital data. In order to configure the ATM to correctly access the enterprise network using this protocol, IP addresses must be entered into the appropriate ATM setup functions. The Addresses are the **HOST IP ADDRESS** (located under the **Configure Processors** parameters) and **LISTENING PORT** (located under the **Configure Terminal** parameters). The **TERMINAL IP ADDRESSES** are auto-detected and can not be changed.

The **HOST IP ADDRESS** is the IP address of the server that processes the terminal transactions. The **LISTENING PORT** value identifies the data being sent to that specific machine.

TCP/IP TIMEOUT is the time that the terminal will wait from the message to be sent to the host and the time it takes for the host to respond.

If Triton Connect® ATM monitoring software is being used, the applicable IP addresses for the Triton Connect host computer must also be entered.

CONFIGURE PROCESSORS COMMUNICATION TYPE

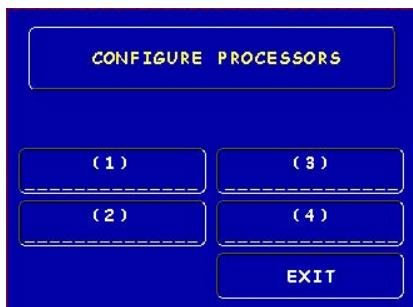
ACCESS INSTRUCTIONS:

1. From the **MAIN MENU** screen, select **CONFIGURE PROCESSORS**.
2. From the **CONFIGURE PROCESSORS** screen, select option **(1)**, **(2)**, **(3)**, or **(4)**.
3. From the **CONFIGURATION FOR:** menu screen, select option **(3)**.



** Important **

Option (1) MUST be configured. It is the default processor for standard ATM transactions.



DESCRIPTION:

The **COMMUNICATION Type** function allows user to toggle between the communication type the terminal is using. You can select either Dialup, TCP/IP, or WIRELESS. The External Ethernet option must be installed to select.

Note: (Model 8100/9100 ATMs)

This function detects the communication type installed and **WILL NOT** allow user to change (toggle). It also sets the communication type for Triton Connect



COMMUNICATION NUMBERS

ACCESS INSTRUCTIONS:

1. From the **MAIN MENU** screen, select **CONFIGURE PROCESSORS**.
2. From the **CONFIGURE PROCESSORS** screen, select option **(1), (2), (3),** or **(4)**.
3. From the **CONFIGURATION FOR:** menu screen, select option **(4),** **COMMUNICATION NUMBERS.**



DESCRIPTION:

The **COMMUNICATION Numbers** function allows entry of the **Host IP Addresses** when using wireless communications type.

The Host IP Address is the IP address of the server that will process the terminal transactions. The address is provided by your host Network Administrator. The address consists of a sequence of four groups of numbers. Each group can be up to three digits long and each group is separated by a period (dot character), as in this example: **123.3.01.99** The second part of the address is a **Port Number**, consisting of five (**5**) digits or less, separated from the first part by a comma (',') character, as in this example: **123.3.01.99,23353. (No Spaces!)**

Follow these steps to initially enter or change the **PRIMARY Host IP ADDRESS**:

- ☛ Select which host address you want to enter/change (Primary/Backup).
- ☛ Enter the first group of numbers in the IP Address using the main keypad keys.
- ☛ Enter a ‘dot’ character by pressing the <Control> key, then the <0> key Twice to select the period’, then the <Right Arrow> key to lock it in.
- ☛ Repeat Steps 2 and 3 for the second and third group of numbers in the IP Address.
- ☛ Enter the fourth group of numbers in the IP Address.
- ☛ Enter the comma (“,”) character by pressing the <Control> key, then the <0> key Once to select the comma. Press the <Right Arrow>key to lock it in.
- ☛ Enter the **PORT NUMBER**. Select <Enter> to save the Host /IP Address entry, or <Cancel> to discard the changes. Repeat steps for **BACKUP HOST TCP/IP ADDRESS** entry.

CONFIGURE TERMINAL WIRELESS CONFIGURATION

ACCESS INSTRUCTIONS:

1. From the **MAIN MENU** screen, select **CONFIGURE TERMINAL**.
2. From the **CONFIGURE TERMINAL** screen, select **MORE**.
3. From the **MORE** screen, select **COMMUNICATION**.
4. From the **COMMUNICATION** screen, select **TCP/IP CONFIGURATION**.

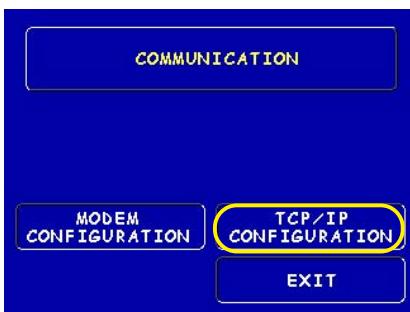


DESCRIPTION:

The **TCP/IP CONFIGURATION** option allows access to setup parameters that control communication between the ATM and the wireless network.

The following parameters are accessed through the **NETWORK SETTINGS** option and described on the following pages:

- **TERMINAL IP ADDRESS**
- **LISTENING PORT**
- **TCP/IP TIMEOUT**



NETWORK SETTINGS

DESCRIPTION:

The **TERMINAL IP ADDRESS** identifies the ATM as the source of the data packet, and is used by the host server to return acknowledgements, transaction approvals, or other data to the ATM.



Note: This Address is auto-detected from the wireless modem hardware. You **will not** be able to change these parameters.

The **LISTENING PORT** and **TCP/IP TIMEOUT** parameters are provided by the host network.

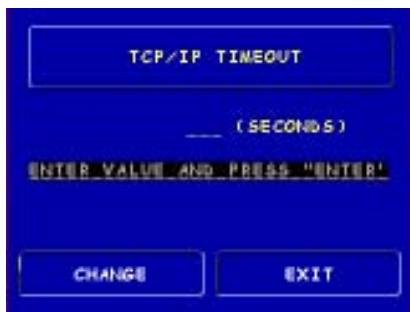
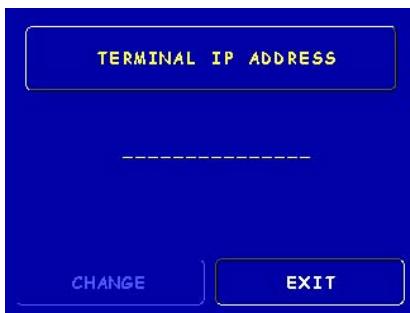
The **LISTENING PORT** value identifies the data being sent to that specific machine. This value consists of five (5) digits or less. **Note: Default value is 1000.**

The **TCP/IP TIMEOUT** is defaulted to 120 seconds, but may be increased or decreased depending on response time. Maximum timeout value is 999 seconds.

Follow the steps below to initially enter or change the **LISTENING PORT**:

- Select <Change> to blank the current entry, if necessary.
- Enter the Port Number. Select <Enter> to save the entry, or <Cancel> to discard the changes.

Follow the steps above to enter or change the **TCP/IP TIMEOUT**.

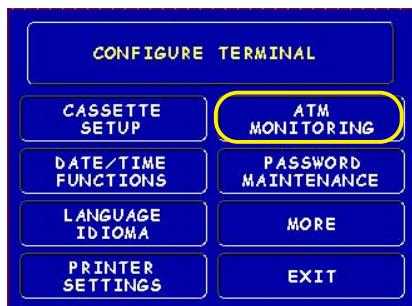


TRITON CONNECT WIRELESS CONFIGURATION

ACCESS INSTRUCTIONS:

1. From the **MAIN MENU** screen, select **CONFIGURE TERMINAL**.
2. From the **CONFIGURE TERMINAL** screen, select **ATM MONITORING**.
3. From the **ATM MONITORING** screen, select **TRITON CONNECT**.

Important
If using, turn Triton Connect <ON> after entering the Configuration parameters.



DESCRIPTION:

The **TRITON CONNECT** function allows the terminal operator to set up parameters that control wireless communications between the ATM and Triton Connect PC-based software to remotely manage your Triton Systems ATMs. The following parameters are accessed through this function and described on the following pages:

- **HOST NUMBERS**
- **ALARM NUMBERS**
- **TCP/IP CONFIGURATION**



Note: You need to have the communication device (wireless, ethernet, dial-up modem) installed before attempting to configure their respective settings.

TRITON CONNECT HOST NUMBERS (ADDRESS)

DESCRIPTION:

The **TRITON CONNECT HOST NUMBERS** are provided by the Triton Connect Administrator. If you are using **TCP/IP** as your communication type, you will need to enter the **Triton Connect Host TCP/IP Addresses** and **Listening Port** information. The first part of the address consists of a sequence of four groups of numbers. Each group can be up to three digits long and each group is separated by a period (dot character), as in this example: **123.3.01.99** The second part of the address is a **Port Number**, consisting of four (4) digits or less, separated from the first part by a comma (“,”) character, as in this example: **123.3.01.99,9323. (No Spaces!)** The default Listening Port for Triton Connect is ‘**9323**’.

Follow these steps to initially enter or change the **TRITON CONNECT PRIMARY HOST NUMBER (ADDRESS)**:



Note: Comms Type Option
For **Model 8100/9100** ATMs, this function detects the communication type installed (wireless) and will not allow user to change (toggle).



- ➊ Select <Change> to blank the current entry, if necessary.
- ➋ Enter the first group of numbers in the TCP/IP Address using the main keypad keys.
- ➌ Enter a ‘dot’ character by pressing the <Control> key, then the <0> key Twice to select the period’, then the <Right Arrow> key to lock it in.
- ➍ Repeat Steps 2 and 3 for the second and third group of numbers in the TCP/IP Address.
- ➎ Enter the fourth group of numbers in the TCP/IP Address.
- ➏ Enter the comma (“,”) character by pressing the <Control> key, then the <0> key Once to select the comma. Press the <Right Arrow> key to lock it in.
- ➐ Enter the Port Number. Select <Enter> to save the Primary TCP/IP Address entry or <Cancel> to discard the changes. Repeat steps for **BACKUP TCP/IP ADDRESS**, if needed.

TRITON CONNECT ALARM NUMBERS (ADDRESS)

DESCRIPTION:

The **TRITON CONNECT ALARM NUMBERS** are provided by the Triton Connect Administrator. If you are using **TCP/ IP** as your communication type, you will need to enter **Alarm TCP/IP Addresses**.

The first part of the address consists of a sequence of four groups of numbers. Each group can be up to three digits long, and each group is separated by a period (dot character), as in this example: **123.3.01.99** The second part of the address is a Port Number, consisting of four (**4**) digits or less, separated from the first part by a comma (”,”) character, as in this example: **123.3.01.99,9043**. (**No Spaces!**)

Follow these steps to initially enter or change the **TRITON CONNECT PRIMARY ALARM NUMBERS (ADDRESS)**:

- ⦿ Select <Change> to blank the current entry, if necessary.
- ⦿ Enter the first group of numbers in the TCP/IP Address using the main keypad keys.
- ⦿ Enter a ‘dot’ character by pressing the <Control> key, then the <0> key Twice to select the period’, then the <Right Arrow> key to lock it in.
- ⦿ Repeat Steps 2 and 3 for the second and third group of numbers in the TCP/IP Address.
- ⦿ Enter the fourth group of numbers in the TCP/IP Address.
- ⦿ Enter the comma (”,”) character by pressing the <Control> key, then the <0> key Once to select the comma. Press the <Right Arrow> key to lock it in.
- ⦿ Enter the Port Number. Select <Enter> to save the Primary Alarm TCP/IP Address entry or <Cancel> to discard the changes. Repeat steps for **BACKUP ALARM TCP/IP ADDRESS**, if needed.



TRITON CONNECT TCP/IP CONFIGURATION

DESCRIPTION:

The **LISTENING PORT** parameters are provided by your host network administrator.

The **TERMINAL IP ADDRESS** identifies the ATM as the source of the data packet, and is used by the host server to return acknowledgements, transaction approvals, or other data to the ATM.

Note: This Address is auto-detected from the wireless modem hardware. You **will not** be able to change these parameters.

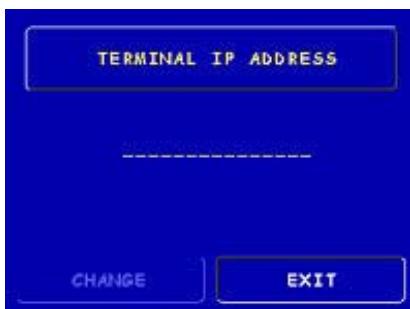
The **LISTENING PORT** value identifies the data being sent to that specific machine. This value consists of five (5) digits or less. **Note: Default value is 1000.**

Note: The Listening Port value should **match** the value entered in Network Settings, page 84.

Follow the steps below to initially enter or change the **LISTENING PORT**:

- ➊ Select <Change> to blank the current entry, if necessary.
- ➋ Enter the Port Number. Select <Enter> to save the entry, or <Cancel> to discard the changes.

Follow the steps above to enter or change the **TCP/IP TIMEOUT**.



WIRELESS DIAGNOSTICS

ACCESS INSTRUCTIONS:

1. From the **MAIN MENU** screen, select **DIAGNOSTICS**.
2. From the **DIAGNOSTICS** screen, select **More Diagnostics**.
3. From **MORE DIAGNOSTICS** screen, select **COMMUNICATION**.
4. From the **COMMUNICATION** screen, select **WIRELESS DIAGNOSTICS**.



DESCRIPTION:

The **WIRELESS DIAGNOSTICS** function allows you to connect or disconnect from the Host network. It also provides a modem status report and receive signal strength indication of the wireless modem.



Once you select the Wireless Diagnostics function, the modem will automatically be brought “**OFFLINE**”. The following options can then be accessed and are described on the following page:

- MODEM STATUS
- SIGNAL STRENGTH
- REACTIVATE MODEM

* Important *

The network connection is dropped for this diagnostics function in order to view Modem Status and Receive Signal Strength readings. When exiting this function, the modem is brought “**Online**”.



WIRELESS DIAGNOSTICS MODEM STATUS

WIRELESS MODEM
DIAGNOSTICS

MODEM
STATUS

REACTIVATE
MODEM

SIGNAL
STRENGTH

EXIT

IP Address: 166.158.147.39
Wireless Number: 5553647345
Service: 1
Registration: 0, 1
Mobile IP: 2
Serial Number: F60B3C40
Program Version: WZ2.05V
Eeprom Version: 240.83, 511

PRINT

EXIT

DESCRIPTION:

The MODEM STATUS option displays a report that shows the parameters loaded in the wireless modem module (IP address, serial number, program, eeprom). It also displays the network services applicable to your wireless application. This report can be printed to the receipt printer.

The following describe the modem status report:

IP ADDRESS: This is the IP address that Verizon loaded onto the module. It could be all zeros (0) if the module has not registered with the network.

WIRELESS NUMBER: The telephone number of the module.

SERVICES: Queries for the service type (analog or digital):

0 - No service available.	2 - TDMA digital service available.
1 - CDMA digital service available.	3 - Analog service is available.

REGISTRATION: #, #

First #:

0 - Unsolicited registration information from the modem disabled.
1 - Modem returns unsolicited network registration code.

Second #:

0 - Not registered, MS is not currently searching for a base station.
1 - Registered, home network.
2 - Not registered, MS currently searching for a base station.
3 - N/A
4 - Unknown
5 - Registered, roaming.

MOBILE IP: Indicates whether the module is setup for **Mobile IP only = 2** or **Mobile IP Preferred = 1**. When the module connects to the Verizon network, Verizon assigns it an IP address. These modules have been configured for static IP addresses which dictate that a specific IP address be downloaded to the module. But, if the module is set up for **Mobile IP Preferred**, it will first attempt to load the assign static IP address. If this IP is unavailable for some reason, Verizon will load an arbitrary IP address. If the module is set up for **Mobile IP only** and the primary static IP address is unavailable, the module will just fail to register on the network.

SERIAL NUMBER: This is the ESN of the module in hex.

PROGRAM VERSION: The modem software version number.

EPROM VERSION: The modem Eprom version number.



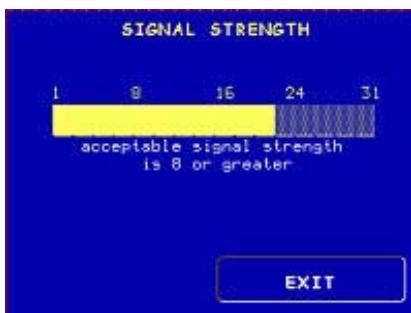
WIRELESS DIAGNOSTICS

SIGNAL STRENGTH

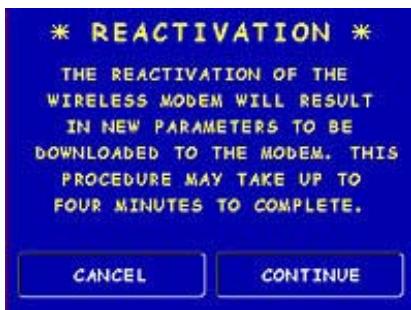
REACTIVATE MODEM

DESCRIPTION:

The **SIGNAL STRENGTH** option enables viewing the strength of the signal being received by the modem antenna. The function uses a measurement range of 1 to 31 dBm. Higher the number, greater the signal strength. The signal strength indicator is dynamic and provides real-time indication of signal received.



The **REACTIVATE MODEM** initiates an Over-the-Air (OTA) activation to the service provider. This is typically used to provide updated information on the cellular service. After initiating, the cellular provider will program the proper parameters into the modem.



* Note *

In the event the modem fails to go **“Online”** after exiting from the Wireless Diagnostics, select this option. It will attempt a “reboot” with the Host network. If that fails, the screen at right will appear.

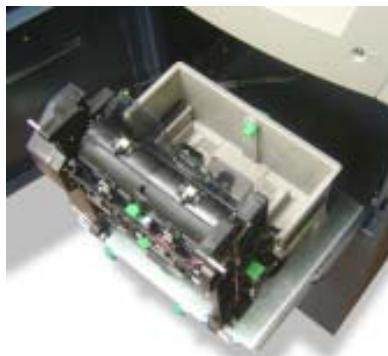
MODEM FAILED REACTIVATION.

1. ENSURE MODEM IS CONNECTED AND POWERED ON.
2. CONTACT TECHNICAL SUPPORT

SECTION 4

CASSETTE CLOSE

CASH REPLENISHMENT



INTRODUCTION

The purpose of this section of the manual is to describe the procedures for cassette closing and replenishment.

Information concerning note handling and quality issues are explained initially.

DISPENSING MECHANISM

The Model 8100 ATM uses a TDM-50 dispensing mechanism. The recommended capacity is **400 notes**. Currency capacity depends on the note quality and thickness.

The dispensing mechanism delivers the appropriate number of notes from the note cassette to fulfill the customer's withdrawal request. The purpose of the reject area or cassette is to accept and hold notes that have been transferred from the note cassette but not dispensed. Some situations that could cause the mechanism to reject notes are: (1) multiple notes stuck together and (2) note width too short or long. Other conditions that could cause a reject are described in the next section, Note Condition.

NOTE CONDITION

If possible, store currency at room temperature for at least eight hours before dispensing from the cassettes.

The number of rejects can be directly influenced by the technique used to load the cassettes and the quality of the currency. Notes loaded into the cassettes must be in "fit" condition if a high level of performance (low reject and failure rate) is expected from the unit. "Fit" notes do not possess any of the defects listed:

****WARNING****

DO NOT RECYCLE REJECTED NOTES INTO A CASSETTE!

Doing so could cause more rejects and/or currency jams.

CURRENCY HANDLING

USED NOTE DEFECTS

- Adhesive or “sticky” substances on the surface of the paper.
- Tears extending more than 1/2” from the edge of the currency.
- Tears, holes, or missing sections in the body of the currency.
- Tape on the surface of the currency used for repairing, patching or any other purpose.
- Staples, pins, or any other foreign body attached to the notes.
- Corner folds of a size greater than 1/2” on either axis.
- Two or more notes joined by any means.
- Excessively crumpled or crinkled.

NEW OR UNCIRCULATED NOTE DEFECTS

- All the conditions listed for used notes.
- Excessive bowing due to conditions of packing and storing.
- New or uncirculated currency must be “burst” and fully separated prior to loading into cassettes.

PREPARING NOTES

Use the following procedures to prepare notes before inserting them into a note cassette.

PREPARING USED NOTES

- Remove the band around each bundle of notes.
- Remove foreign objects (e.g. pins, paper clips, crumbs, etc.).
- Remove torn or very worn notes.
- Straighten any folded notes.

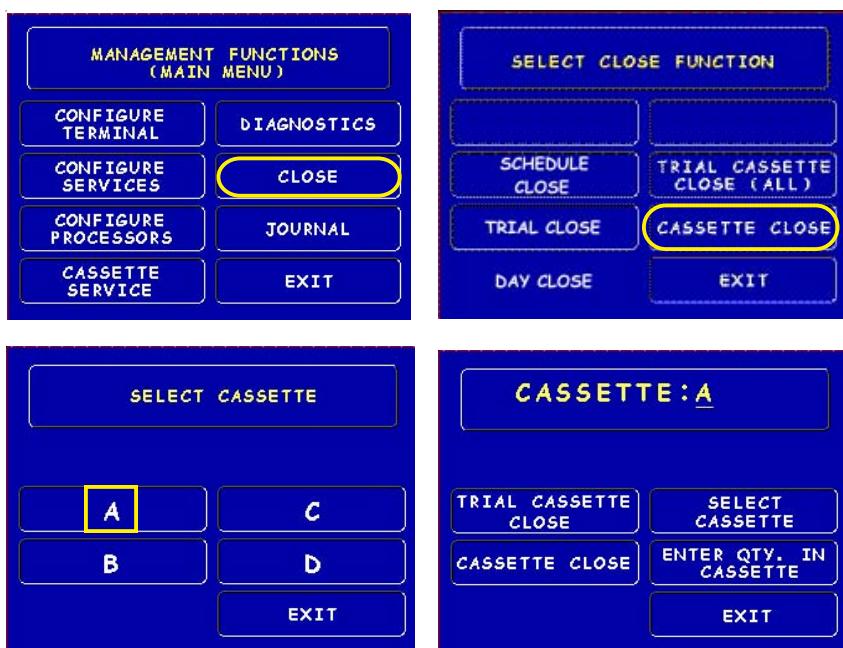
PREPARING NEW OR UNCIRCULATED NOTES

- Remove the band around each bundle of notes. Separate the notes from each other by:
 - Striking the bundle hard against the edge of a table or similar object.
 - Flipping through each bundle of notes in both directions at each end.
 - Using a Note Counter.

CASSETTE CLOSE

This function is used to complete the balancing of the specified cassette. It prints a report summarizing all activity on the selected cassette since the last **Cassette Close** and clears the totals. It also resets the number of bills in the cassette to zero (0).

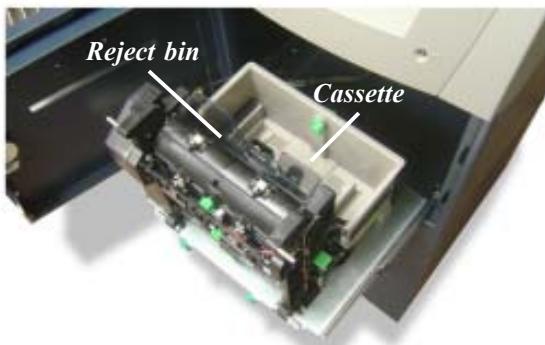
1. At the control panel keypad, press and hold the <CTL> key (blank key), then press the number <1> key. The top menu will be displayed. Release both keys.
2. At the top menu, select “**MANAGEMENT FUNCTIONS**”. When prompted, enter your password. Press the <Enter> key to display the Management Functions Main Menu screen.
3. Select **CLOSE > CASSETTE CLOSE > SELECT CASSETTE** (*Only Cassette A is available for single cassette dispensers*) > **CASSETTE A: CASSETTE CLOSE**.



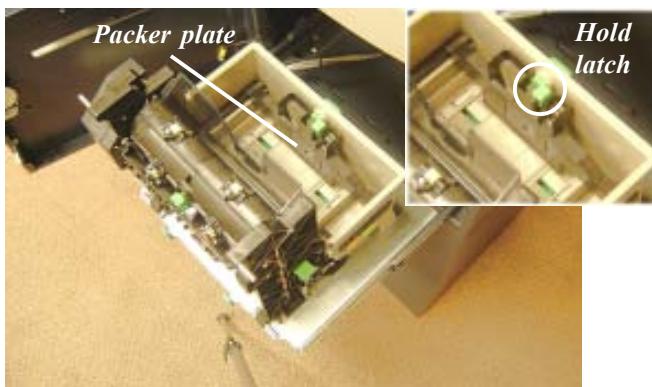
4. After selecting Cassette A: Cassette Close, a report will be printed summarizing all activity since the last Cassette Close. The number of bills in the cassette will be reset to zero (0).

REPLENISH CASSETTE (TDM-50)

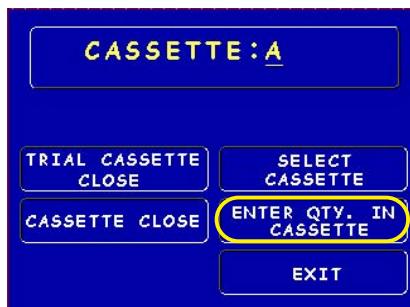
1. Unlock and open the security cabinet door.
2. Extend the dispenser mounting tray fully as shown below.



3. Remove all notes from the reject bin. **Note:** Bills in the reject bin have not been dispensed and are considered to be part of the currency remaining at the time of the Cassette Close. Rejected currency is not normally returned to the cassette.
4. Move the packer plate to the rear of the cassette and latch in place with the hand-operated hold back latch shown below.



5. Count the number of bills that remain in the cassette, if any. Next, count the number of bills that are being added into the cassette.
6. Add the number of bills being placed into the cassette to the number that remained. The “**Total**” number of these bills will be entered in the “**ENTER QTY. IN CASSETTE**” option. Place the currency into the cassette between the pusher plate and front of cassette.
7. Select **ENTER QTY. IN CASSETTE** option. This option allows entry of the number of notes in the cassette. This number is used as the starting point for the cassette close report. ***Note: Enter the total number of notes in the cassette, NOT the value of the documents.**



8. Select **TRIAL CASSETTE CLOSE** option. A report will be printed verifying the amount of bills you entered in the previous step. Totals are not cleared or reported to the host.
9. Push the mounting tray back into the security cabinet and close/lock the security door.

SECTION 5

GENERAL MAINTENANCE

INTRODUCTION

This section of the manual covers preventive and corrective maintenance procedures appropriate for user personnel. The following areas are covered:

1. **REPLENISHING RECEIPT PAPER.** Describes how to replace a spent receipt paper roll.
2. **CLEANING THE ENCLOSURE.** The proper way to clean the ATM housing.
3. **CARD READER CLEANING.** The recommended card reader cleaning technique.

Important

Only qualified service personnel are authorized to repair or service the terminal. Should a malfunction occur, DO NOT attempt to service the unit yourself! Contact your Triton certified service provider!

REPLENISHING THE RECEIPT PAPER

NOTE: This operation must be completed with the AC power applied to the ATM.

1. Open the top of the ATM by unlocking the top enclosure and pulling the hinged door forward.
2. If paper remains on the roll, cut or tear the paper between the roll and the printer.

**** Caution ****

DO NOT pull receipt paper backwards through the printer! This may leave paper fragments that can cause paper jams.

3. Use the receipt printer feed button (as shown in Figure 6-1) to feed the paper through the paper path until all paper comes out the front of the printer.
4. Remove the paper and spool from the paper bracket .

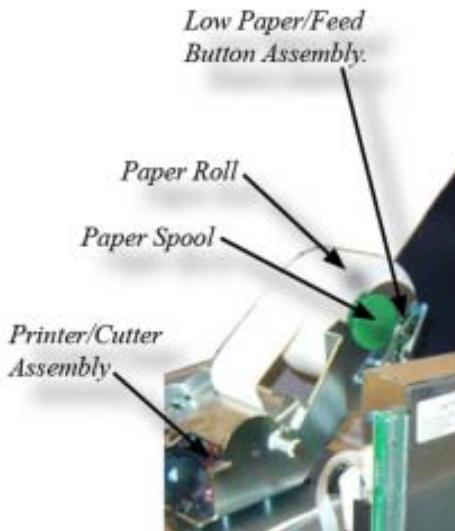


Figure 6-1. Printer assembly.

5. Pull out on the locking pin located in Figure 6-2. Rotate the printer/cutter assembly to the service position (Figure 6-3).



Figure 6-2. Locking pin.



Figure 6-3. Printer/cutter in Service position.

6. Rotate the green knob located on the left side of the printer/cutter assembly **clockwise** to the “open” position.. Remove any scraps of paper that remain in the assembly.
7. Rotate the green knob **counterclockwise** back to the “closed” position. Pull the locking pin and rotate the assembly back to the operate position.

8. Loosen the end of the new paper roll. Use scissors to cut off about 18" from the end of the roll. **Note:** Make sure the glue tab is completely removed from the end of the paper roll.

Notice

The APS printer assembly installed in Model 8100 ATMs requires **58 mm**-wide thermal paper. Using 60 mm-wide paper (available in other 8-bit units) may cause printer jams or skewed tracking!

9. Insert the spool into the new paper roll. Place the paper roll and spool on the paper bracket by sliding the small slotted end of the spool into the U-shaped slot of the paper bracket. When installed, the paper will feed from the **TOP** of the roll (Figure 6-4).
10. Feed the end of the paper into the printer take-up slot (Figure 6-5). The printer will activate and automatically feed the paper through the printer and slightly out the front of the control panel.



Figure 6-4. Paper/spool in bracket. Figure 6-5. Feed paper in take-up slot.

11. If the printer does not feed automatically, open the printer assembly (step 5) and check the green knob to ensure it is in the correct position (counterclockwise position). Close the printer assembly and perform steps 9 and 10 again.
12. Close and lock the control panel. Go to **MANAGEMENT FUNCTIONS > DIAGNOSTICS** and perform a **TEST RECEIPT PRINTER**. If the test receipt is printed successfully, place the ATM back in service.

CLEANING THE ENCLOSURE

The ATM front panel is highly durable, resisting scratches and finger smudges. However, occasional cleaning of the front panel and the plastic enclosure may be desirable. A soft dry or slightly damp cloth may be used for cleaning. For best results, use a weak solution of a mild detergent and water.

**** Caution ****

**Avoid using abrasive cleaners on any surface of the terminal.
Do not spray liquid cleaner directly on the unit.**

CLEANING THE DISPLAY

The Liquid Crystal Display (LCD) on the front of the ATM has a plastic protective window that should be cleaned only with a soft cloth, dampened with a weak solution of a mild detergent and water.

**** Caution ****

**Do not use any abrasive cleaners on the window as it will scratch.
Do not spray liquids onto the screen as they may run down inside
the unit and cause damage.**

CARD READER CLEANING

Special cleaning cards (P/N 06200-00055) are available for proper maintenance of the card reader. The reader should be cleaned at least once a month by inserting and removing a cleaning card, as shown below. It may be necessary to clean the card reader more often in locations that see heavy usage.

1. Remove the cleaning card from the sealed pouch.
2. Insert the cleaning card into the card reader and move in and out several times.
3. Remove the cleaning card and turn over to use other side.
4. Insert again several times.
5. Remove cleaning card and discard.



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SECTION 6
TDM ERROR CODES
CLICK COUNTS

TDM ERROR CODES

Description	Error Code
Good operation	32
Reject rate exceeded	48
Suspect exit accountancy	51
Operation timeout	54
Cassettes shuffled	65
Unexpected note in extension (Billfish)	89
Billfish cable error	96
Trailing edge timeout at billfish exit	97
Billfish exit timeout	98
Excessive skew detected	99
Trailing edge timeout at skew 5	100
Error (2 sec. timeout waiting for pick)	101
Timeout at exit sensor	102
Thickness sensor unstable	103
Unable to clear width sensors during reject	104
Error with "Learn" command	105
FIFO error	106
Suspect reject accountancy	107
Unexpected note at thickness	108
Timeout at exit sensor	109
Trailing edge timeout at exit	110
Divertor timeout	111
Timeout waiting for leading edge at reject	112
Timeout waiting for trailing edge at reject	113
Exit blocked during purge	114
Divertor timeout on purge	115
Motor fault	116
Timeout waiting for notes to divert	117
Exit sensor blocked on start of dispense or learn	118
Divertor in dispense position on start of dispense or learn	119
Reject cassette not present	120

TDM ERROR CODES

Description	Error Code
Note cassette not present	121
Unexpected note at exit	122
Hardware error (see Hardware Status Codes)	123
Divertor moved to exit position during reject / purge	124
Initial status check failed	125
Divertor moved to reject position during dispense	126
Jam in Billfish	127

HARDWARE STATUS CODES

Description	Status Code
Double detect (0) not connected	0x41
Width sensor (0) not connected (Tx)	0x42
Width sensor (0) not connected (Rx)	0x43
Double detect (1) not connected	0x44
Width sensor (1) not connected (Tx)	0x45
Width sensor (1) not connected (Rx)	0x46
Double detect (2) not connected	0x47
Width sensor (2) not connected (Tx)	0x48
Width sensor (2) not connected (Rx)	0x49
Double detect (3) not connected	0x4a
Width sensor (3) not connected (Tx)	0x4b
Width sensor (3) not connected (Rx)	0x4c
Divertor sensor not connected	0x4d
Timing wheel sensor not connected	0x4e
Exit sensor not connected	0x4f
Reject sensor not connected	0x50
Extension sensor not connected	0x51
Extension door open	0x52
Extension main cable disconnected	0x53
12-volt supply low	0x54
12-volt supply high	0x55
24-volt supply low	0x56
24-volt supply high	0x57
Missing pick motor feedback	0x58
Missing solenoid feedback	0x59
Pick motor fuse blown	0x5a
Transport motor fuse blown	0x5b

CLICK COUNTERS

Click Count	Description
1	Non maskable interrupt - Terminal power shutdowns
2	Stack overflow
3	Stack underflow
4	Trap illbus
5	Trap illina
6	Trap illopa
7	Class B trap
8	Trap prtfilt
9	Trap undopc
10	Trap unknown trap
11	CTS timeout
12	Tx Ack error
13	Tx Nak error
14	Tx EOT error
15	Tx response error - Main board
16	LRC error
17	Framing error
18	Overrun error
19	Parity error
20	Verify error - Main board
21	Process error
22	NVRAM read error
23	NVRAM write error
24	Reject rate exceeded - More than 9 notes rejected during a dispense
25	Unexpected note at thickness 0
26	Buffer overflow error
27	Host reset - Mechanism resets
28	Unexpected note at exit during a dispense
29	Width sensors detected note thinner than double-detect
30	Width sensors detected note thicker than double-detect
31	Width sensors disapproved note double-detect

CLICK COUNTERS

Click	Count	Description
	32	Width sensors thickness reading
	33	Undefined
	34	Pick motor timeout - Cassette "A"
	35	Pick motor overcurrent - Cassette "A"
	36	Thickness sensor unstable - Cassette "A"
	37	Skew timeout - Cassette "A"
	38	Thickness sensor timeout - Cassette "A"
	39	Number of resets - Terminal power-up
	40	Exit sensor timeout
	41	Exit sensor trailing edge timeout
	42	Divertor timeout
	43	Reject sensor leading edge timeout
	44	Reject sensor trailing edge timeout
	45	Exit blocked during purge
	46	Divertor timeout on purge
	47	Width sensor blocked on start of dispense or learn
	48	Exit sensor blocked on start of dispense or learn
	49	Divertor in dispense position on start of dispense or learn
	50	Reject cassette not present
	51	Note cassette not present
	52	Unexpected note at exit sensor
	53	Unexpected note at width sensor
	54	Divertor moved to exit position during reject or purge - Dispenser fault
	55	Initial status check failed
	56	Divertor moved to reject position during dispense - Dispenser fault
	57	Unexpected note at reject sensor
	58	Excessive skew on leading edge - Cassette "A"
	59	Excessive skew on trailing edge - Cassette "A"
	60	Note too wide - Cassette "A"
	61	Note too narrow - Cassette "A"
	62	Note too thick - Cassette "A"

CLICK COUNTERS

Click Count	Description
63	Note too thin
64	Solenoid overcurrent
65	Timeout waiting for diverter - Diverter fault
66	Trailing edge timeout at width sensor - Cassette "A"
67	Watch dog reset
68	UART loop back failed
69	CRC flash check failed
70	CRC NVRAM check failed
71	Note not linear at trailing edge
72	Trailing edge timeout at thickness sensor
73	Oscillator WD
74	Forced reject - Will reject 2 notes (1 bad,1 good)
75	Timeout waiting for unexpected note to clear
76	Error in exit accountancy
77	Error in reject accountancy
78	A2D alignment error
79	Unable to clear width sensor during reject - After 9 attempts
80	Retried dispense operation
81	Retry event count
82	A2D Ch15A comparator reference (2.5V)
83	A2D Ch.14A 24VDC (reading x 6)
84	A2D Ch.13 12VDC (reading x 3)
85	A2D Ch.12 Not used
86	A2D Ch.11 Low currency A (not connected)
87	A2D Ch.10 Exit sensor voltage
88	A2D Ch.9 Reject sensor voltage
89	A2D Ch.8 Width sensor 2 voltage A
90	A2D Ch.7 Width sensor 1 voltage A
91	A2D Ch.6 Width sensor 0 voltage A
92	A2D Ch.5
93	A2D Ch.4

CLICK COUNTERS

Click Count	Description
94	A2D Ch.3
95	A2D Ch.2 Double detect voltage A
96	A2D Ch.1 Not used
97	A2D Ch.0 Billfish feedback
98	Logic sensors diverter/dispenser position
99	A2D Ch.11 B Low currency B
100	A2D Ch.8 B Width sensor 2 voltage B
101	A2D Ch.7 B Width sensor 1 voltage B
102	A2D Ch.6 B Width sensor 0 voltage B
103	A2D Ch.2 B Double detect B
104	A2D Ch.11 C Low currency C
105	A2D Ch.8 C Width sensor 2 voltage C
106	A2D Ch.7 C Width sensor 1 voltage C
107	A2D Ch.6 C Width sensor 0 voltage C
108	A2D Ch.2 C Double detect C
109	A2D Ch.11 D Low currency D
110	A2D Ch.8 D Width sensor 2 voltage D
111	A2D Ch.7 D Width sensor 1 voltage D
112	A2D Ch.6 D Width sensor 0 voltage D
113	A2D Ch.2 D Double detect D
114	Jam in Billfish
115	Motor fault - Main transport
116	Bad connection - Billfish door open, connectors, voltage
117	Cassettes shuffled - Cassette(s) not “In Service”
118	Trailing edge timeout at Billfish entrance
119	Billfish exit timeout
120	Billfish excessive skew
121	Trailing edge timeout at Billfish exit - Idler rollers “popped” out
122	Excessive skew on leading edge 1 - Note loading issue
123	Excessive skew on leading edge 2
124	Excessive skew on leading edge 3

CLICK COUNTERS

Click Count	Description
125	Excessive skew on trailing edge 1
126	Excessive skew on trailing edge 2
127	Excessive skew on trailing edge 3
128	Note too wide 1
129	Note too wide 2
130	Note too wide 3
131	Note too narrow 1
132	Note too narrow 2
133	Note too narrow 3
134	Note too thick 1 - Cassette "B" (picked 2 notes)
135	Note too thick 2
136	Note too thick 3
137	Note too thin 1
138	Note too thin 2
139	Note too thin 3
140	Trailing edge timeout at thickness sensor 1
141	Trailing edge timeout at thickness sensor 2
142	Trailing edge timeout at thickness sensor 3
143	Trailing edge timeout at width sensor 1 - 2 notes picked
144	Trailing edge timeout at width sensor 2
145	Trailing edge timeout at width sensor 3
146	Pick motor timeout 1 - Cassette "B"
147	Pick motor timeout2
148	Pick motor timeout 3
149	Pick motor overcurrent 1
150	Pick motor overcurrent 2
151	Pick motor overcurrent 3
152	Skew timeout 1 - Note skewed (width sensor)
153	Skew timeout 2
154	Skew timeout 3
155	Thickness sensor timeout 1 - Double detect fault

CLICK COUNTERS**Click****Count Description**

156	Thickness sensor timeout 2
157	Thickness sensor timeout 3
158	Width sensor blocked on start of dispense or learn 1
159	Width sensor blocked on start of dispense or learn 2
160	Width sensor blocked on start of dispense or learn 3
161	Note cassette not present 1
162	Note cassette not present 2
163	Note cassette not present 3
164	Unexpected note at width sensor 1 - Cassette "B" (check cassette)
165	Unexpected note at width sensor 2
166	Unexpected note at width sensor 3
167	Note not linear at trailing edge 1
168	Note not linear at trailing edge 2
169	Note not linear at trailing edge 3
170	Timeout waiting for unexpected note to clear 1
171	Timeout waiting for unexpected note to clear 2
172	Timeout waiting for unexpected note to clear 3
173	Unable to clear width sensor during reject 1 - Cassette "B" (note jam)
174	Unable to clear width sensor during reject 2
175	Unable to clear width sensor during reject 3
176	Unexpected note at thickness 1 - Cassette "B"
177	Unexpected note at thickness 2
178	Unexpected note at thickness 3
179	Leading edge timeout at channel interface
180	Trailing edge timeout at channel interface
181	Excessive skew at channel interface
182	Timeout waiting for FIFO
183	Unexpected note in extension - enable "Extension Reject" option (RT)
184	Billfish motor fault - Timing wheel, jammed notes
185	Operation timeout
186	Billfish cable error - Feedback error (electronic loop)

| lower/top feed ch.

CLICK COUNTERS

Click Count	Description
187	Learn error
188	FIFO error
189	Timeout waiting for notes to divert
190	Unable to open process

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APPENDIX A

INSTALLATION PROCEDURES

WHAT'S IN THIS APPENDIX

This appendix gives step-by-step procedures for completing the physical installation of a Model 8100 ATM. The appendix is divided into the following sections:

- Introduction.** Summarizes the basic steps that must be completed to physically install a Model 8100 ATM.
- ATM Installation for Accessibility.** Describes the basic Americans with Disabilities Act (ADA) requirements for ATM location and access. Note: These are the general requirements that should be applicable to most installation locations. Please verify the specific requirements with the state where the ATM is to be installed prior to installation. For state contact information, you may call ADA information line at 1-800-514-0301.
- ATM Environmental / Power Precautions Checklist.** Describes the general environmental and power requirements when installing the ATM. To help ensure proper operation of the ATM, ensure the environmental criteria listed in this checklist are met.
- Cabinet (w/plinth) Dimensions.** Displays the dimensions for the cabinet, plinth, exterior control panel components, and signage.
- Plinth Installation - Standard/Chemical Anchors.** Describes how to install the plinth assembly using standard (steel) or chemical anchor bolts.
Note: The anchor kits are NOT included with the unit. You must purchase these optional anchor install kits.
- ATM/Plinth Assembly.** Describes how to install the ATM cabinet to the plinth assembly.
- Dispensing Mechanism Installation.** Describes how to install the TDM-50 dispensing mechanism into the ATM security cabinet.
- Power and Dial-up Communication.** Describes how to route the ATM to the facility power and telephone connections.

ATM INSTALLATION FOR ACCESSIBILITY

ATM Installation for Accessibility

1. This document supercedes all other information provided by Triton for ATM installation for accessibility.
2. The information provided is based on federal guidelines (ADA Accessibility Guidelines for Buildings and Facilities – ADAAG), as amended through January 1998. You should verify it has not been amended. States may also have accessibility codes. These codes may be more restrictive than the federal guidelines. Please verify this with the state where the ATM is to be installed prior to installation. For state contact information, you may call the ADA information line.
3. For countries other than the US, please use the guidelines for accessibility for that country.
4. A complete copy of the ADAAG referred to here can be found at <http://www.access-board.gov>. Included in this document is the section of the ADAAG specifically for ATMs. For additional information on floor surfaces and other ADAAG requirements please see the complete specification.

4.34 Automated Teller Machines.

4.34.1 General.

Each automated teller machine required to be accessible by **4.1.3 (Accessible Buildings: New Construction)** shall be on an accessible route and shall comply with **4.34 (Automated Teller Machines)**.

4.34.2 Clear Floor Space.

The automated teller machine shall be located so that clear floor space complying with **4.2.4 (Clear Floor or Ground Space for Wheelchairs)** is provided to allow a person using a wheelchair to make a forward approach, a parallel approach, or both, to the machine.

4.34.3 Reach Ranges.

(1) Forward Approach Only. If only a forward approach is possible, operable parts of all controls shall be placed within the forward reach range specified in **4.2.5 (Forward Reach)**.

(2) Parallel Approach Only. If only a parallel approach is possible, operable parts of controls shall be placed as follows:

(a) Reach Depth Not More Than 10 inches (255 mm). Where the reach depth to the operable parts of all controls as measured from the vertical plane perpendicular to the edge of the unobstructed clear floor space at the farthest protrusion of the automated teller machine or surround is not more than 10 inches (255 mm), the maximum height above the finished floor or grade shall be 54 inches (1370 mm).

(b) Reach Depth More Than 10 inches (255 mm). Where the reach depth to the operable parts of any control as measured from the vertical plane perpendicular to the edge of the unobstructed clear floor space at the farthest protrusion of the automated teller machine or surround is more than 10 inches (255 mm), the maximum height above the finished floor or grade shall be as follows:

ACCESSIBILITY SPECIFICATIONS			
REACH DEPTH		MAXIMUM HEIGHT	
Inches	Millimeters	Inches	Millimeters
10	255	54	1370
11	280	53 1/2	1360
12	305	53	1345
13	330	52 1/2	1335
14	355	51 1/2	1310
15	380	51	1295
16	405	50 1/2	1285
17	430	50	1270
18	455	49 1/2	1255
19	485	49	1245
20	510	48 1/2	1230
21	535	47 1/2	1205
22	560	47	1195
23	585	46 1/2	1180
24	610	46	1170

(3) Forward and Parallel Approach. If both a forward and parallel approach are possible, operable parts of controls shall be placed within at least one of the reach ranges in paragraphs (1) or (2) of this section.

(4) Bins. Where bins are provided for envelopes, waste paper, or other purposes, at least one of each type provided shall comply with the applicable reach ranges in paragraph (1), (2), or (3) of this section.

EXCEPTION: Where a function can be performed in a substantially equivalent manner by using an alternate control, only one of the controls needed to perform that function is required to comply with this section. If the controls are identified by tactile markings, such markings shall be provided on both controls.

4.34.4 Controls.

Controls for user activation shall comply with **4.27.4 (Operation)**.

4.34.5 Equipment for Persons with Vision Impairments.

Instructions and all information for use shall be made accessible to and independently usable by persons with vision impairments.

(20) Where automated teller machines (ATMs) are provided, each ATM shall comply with the requirements of **4.34 (Automated Teller Machines)** except where two or more are provided at a location, then only one must comply.

EXCEPTION: Drive-up-only automated teller machines are not required to comply with **4.27 (Controls and Operating Mechanisms)** and **4.34.3 (Reach Ranges)**.

4.2.4 Clear Floor or Ground Space for Wheelchairs.

4.2.4.1 Size and Approach.

The minimum clear floor or ground space required to accommodate a single, stationary wheelchair and occupant is 30 inches by 48 inches (760 mm by 1220 mm) (see Fig. 4(a)). The minimum clear floor or ground space for wheelchairs may be positioned for forward or parallel approach to an object (see Fig. 4(b) and 4(c)). Clear floor or ground space for wheelchairs may be part of the knee space required under some objects.

4.2.4.2 Relationship of Maneuvering Clearance to Wheelchair Spaces.

One full unobstructed side of the clear floor or ground space for a wheelchair shall adjoin or overlap an accessible route or adjoin another wheelchair clear floor space. If a clear floor space is located in an alcove or otherwise confined on all or part of three sides, additional maneuvering clearances shall be provided as shown in Fig. 4(d) and 4(e).

4.2.4.3 Surfaces for Wheelchair Spaces.

Clear floor or ground spaces for wheelchairs shall comply with **4.5 (Ground and Floor Surfaces)**.

4.2.5 Forward Reach.

If the clear floor space only allows forward approach to an object, the maximum high forward reach allowed shall be 48 inches (1220 mm) (see Fig. 5(a)). The minimum low forward reach is 15 inches (380 mm). If the high forward reach is over an obstruction, reach and clearances shall be as shown in Fig. 5(b).

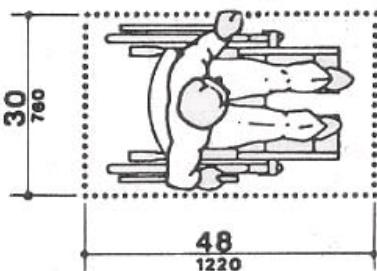


Figure 4a. Clear floor space.

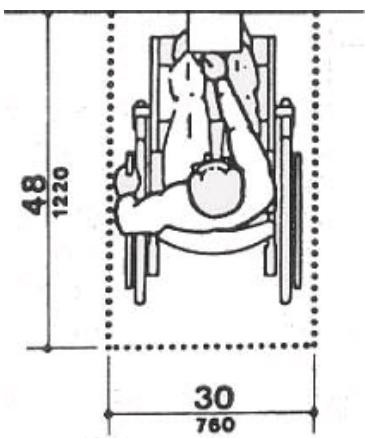


Figure 4b. Forward approach.

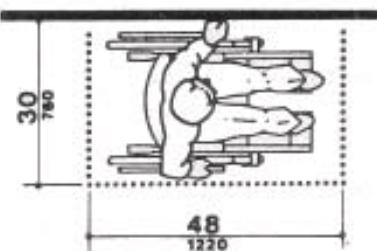
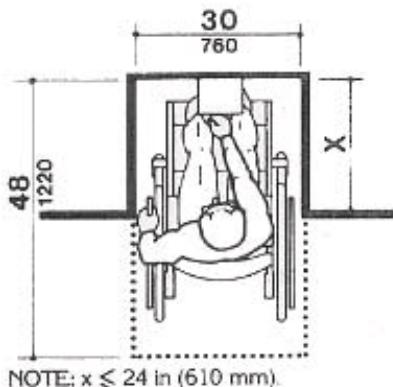
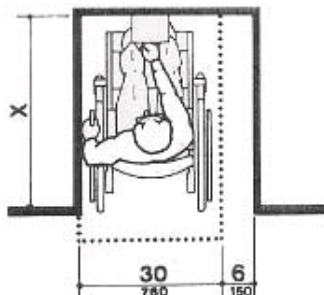


Figure 4c. Parallel approach.

4.2.6 Side Reach. If the clear floor space allows parallel approach by a person in a wheelchair, the maximum high side reach allowed shall be 54 inches (1370 mm) and the low side reach shall be no less than 9 inches (230 mm) above the floor (Fig. 6(a) and 6(b)). If the side reach is over an obstruction, the reach and clearances shall be as shown in Fig 6(c).

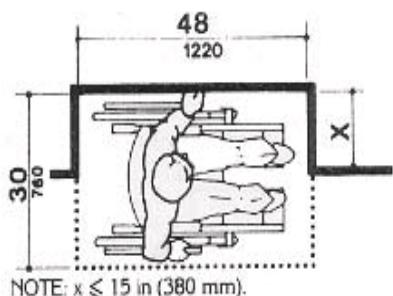


For a front approach, where the depth of the alcove is equal to or less than 24 inches (610 mm), the required clear floor space is 30 inches by 48 inches (760 mm by 1220 mm).

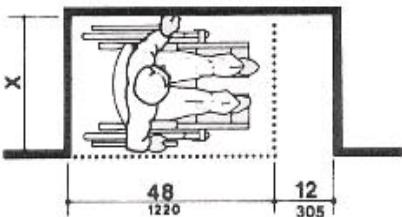


NOTE: If $x > 24$ in (610 mm), then an additional maneuvering clearance of 6 in (150 mm) shall be provided as shown.

For a front approach, if the depth of the alcove is greater than 24 inches (610 mm), then in addition to the 30-inch (760 mm) width, a maneuvering clearance of 6 inches (150 mm) in width is required.



For a side approach, where the depth of the alcove is equal to or less than 15 inches (380 mm), the required clear floor space is 30 inches by 48 inches (760 mm by 1220 mm).



NOTE: If $x > 15$ in (380 mm), then an additional maneuvering clearance of 12 in (305 mm) shall be provided as shown.

For a side approach, where the depth of the alcove is greater than 15 inches (380 mm), then in addition to the 48-inch (1220 mm) length, an additional maneuvering clearance of 12 inches (350 mm) is required.

Figure 4d. Clear floor space in alcoves.

Figure 4e. Clear floor space in alcove.

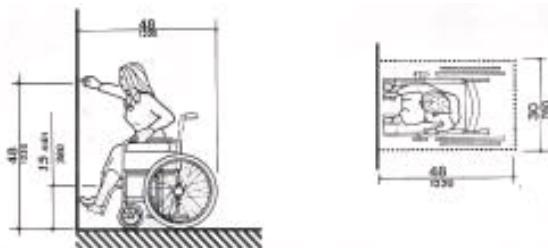
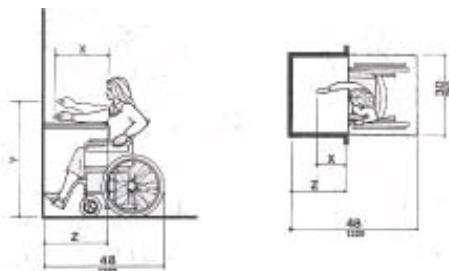


Figure 5a. Forward reach, unobstructed.



NOTE: x shall be 62.5 cm (25 in/635 mm); x shall be 20 in. When x < 20 in (510 mm), then y shall be 43 in (1120 mm) maximum. When x is 25 in (635 mm), then y shall be 44 in (1120 mm) maximum.

Figure 5b. Forward reach, obstructed.

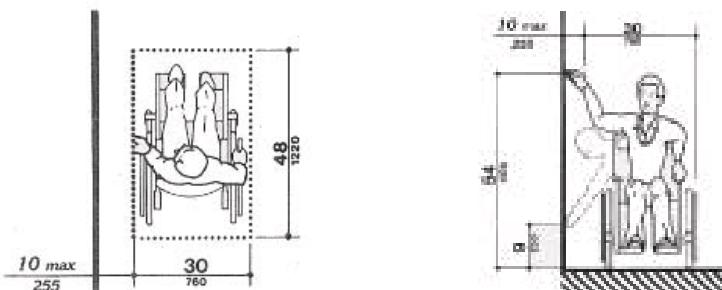


Figure 6a. Parallel approach - side reach.

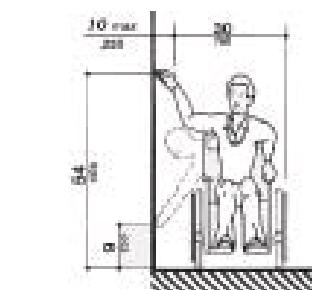
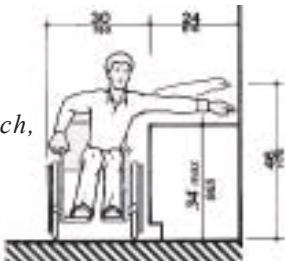


Figure 6b. Parallel approach - high/low side reach.

Figure 6c. Side reach, obstructed.



INSTALLATION PROCEDURES

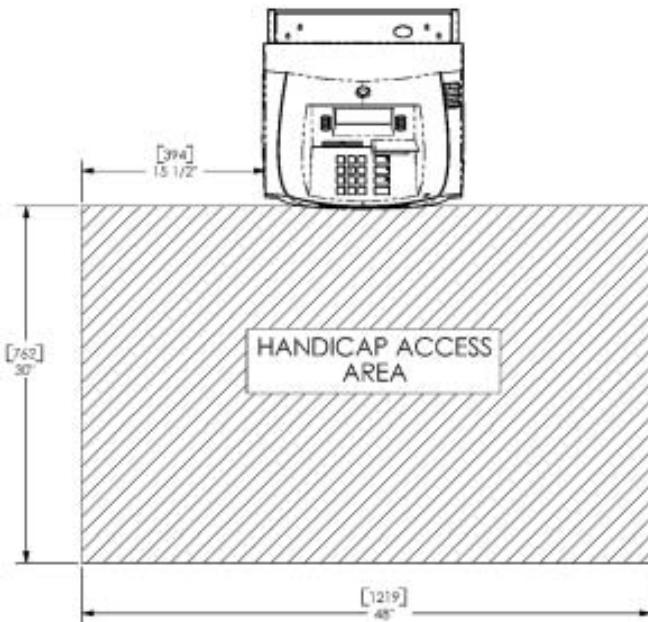


Figure 7. Handicap access area.

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ENVIRONMENTAL AND POWER CHECKLIST

When installing an ATM, some general environmental and power precautions need to be considered. Evaluate the location where the ATM will be installed. To help ensure proper operation of the ATM, ensure the environmental criteria listed in this checklist are met.

TEMPERATURE/HUMIDITY

- The ATM will operate over a range of temperatures and humidity. Generally, these parameters must fall within the following ranges:**

- Temperature**
 - 10°C - 30°C
 - 50°F - 104°F
- Relative Humidity**
 - 20% - 80%
 - (Non-Condensing)

AC POWER REQUIREMENTS

- Ensure the following AC power requirements are met:**

- Power Consumption**
 - 2.0A @ 115 VAC at 60 Hz
 - 1.0A @ 230 VAC at 50 Hz

Dedicated source. The ATM AC power feed will be a dedicated line, to which no other electrical devices are connected. The ATM power line will be wired for a single “duplex”-style outlet and connected directly to the AC service panel.

* IMPORTANT *

AC power for the terminal should come from a dedicated source with an isolated ground.

Isolated Ground. An equipment grounding conductor that is insulated from the conduit or raceway and all other grounding points throughout its entire length. The only points of electrical connection will be at the duplex outlet and service panel ends of the line.

DEDICATED TELEPHONE

- Ensure the following telephone-line requirements are met:**

Dedicated line. The telephone line servicing the ATM will not be a “party” line or any other shared type connection.

Proximity to Interference Sources. The telephone line must not be in close proximity to “noisy” devices that could induce interference into the ATM communications channel. See the next section for additional information on “interference sources.”

RF INTERFERENCE

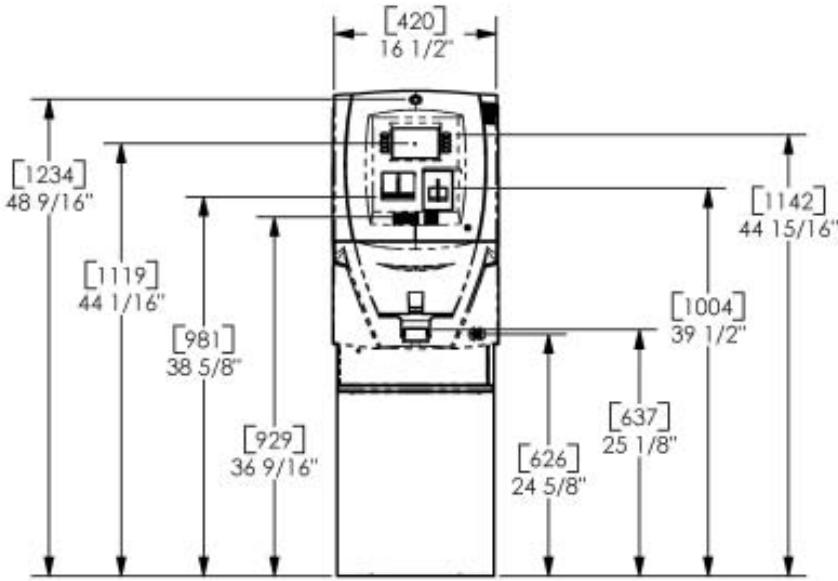
- Ensure there are no devices near the terminal that may cause RF interference, such as:**

- TVs
- Coolers
- Security devices
- Neon signs
- Devices with compressors

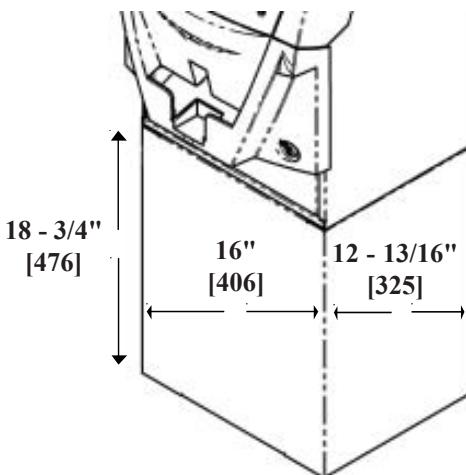
CABINET (W/PLINTH) DIMENSIONS

Note

All dimensions listed comply with US Federal ADA Guidelines. For USA installations, check for additional guidance. For non-USA installations, check regulations relating to the country of install. Dimensions in brackets measured in millimeters (mm).

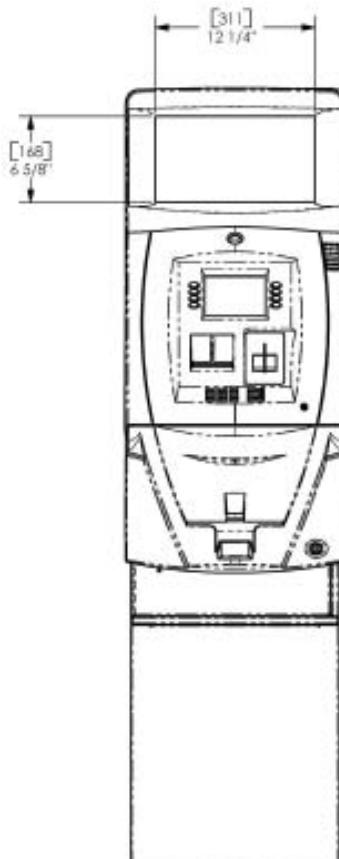


Cabinet (front view)

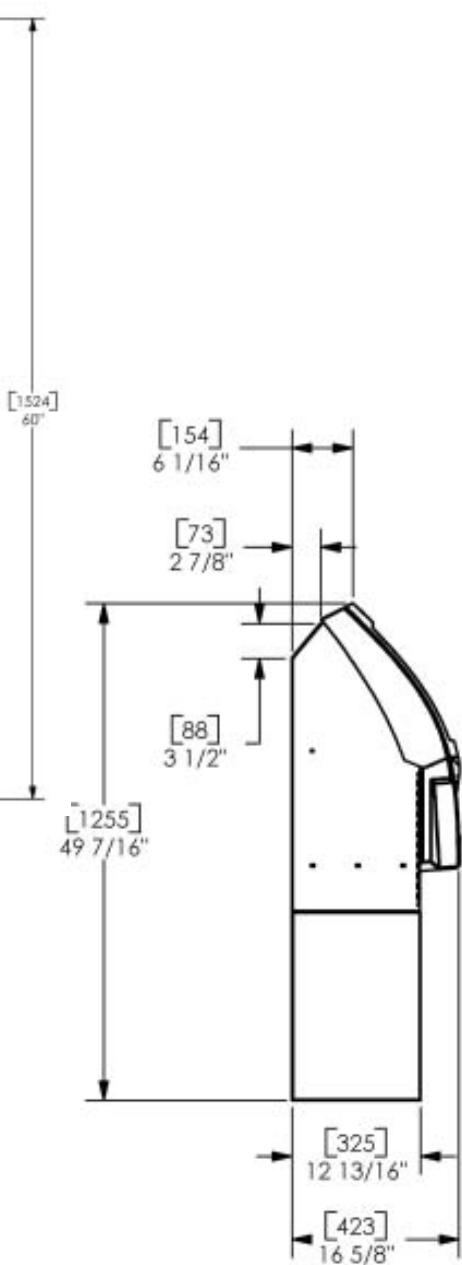


Plinth

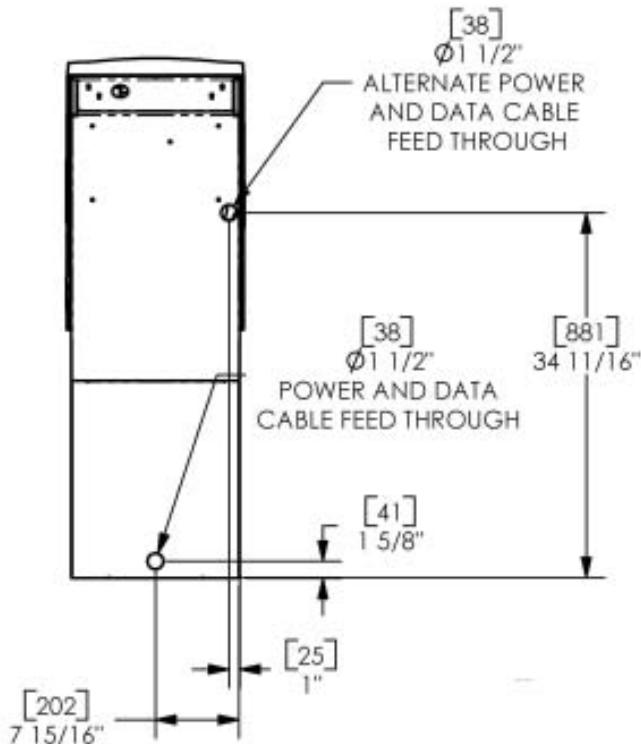
INSTALLATION PROCEDURES



Cabinet (w/signage)



Cabinet (side view)



Cabinet (rear view)

**PLINTH / CABINET / DISPENSER
INSTALLATION**

PLINTH INSTALLATION

The following procedure applies to installing the plinth assembly using either standard (P/N 06200-00066) or chemical (06200-00060) anchor kits. The anchor kits are not supplied with the unit.

Tools Required		
Torque wrench, adjustable to at least 60 foot pounds, adjustable crescent wrench, or ratchet wrench		
Center punch (or equivalent) for marking drill points		
Hammer	3/4" (19 mm) socket	Large flat screwdriver
Bubble level	7/16" socket / box wrench	Safety goggles
Hearing protection	1/4" (6 mm) , 1/2" (12 mm), and 9/16" (15 mm) carbide-tipped masonry drill bits - at least 6" long	3/4" heavy -duty electric drill (rotary/hammer)
Back support belt	Portable vacuum cleaner	Wire brush
Standard Anchor Kit		
1/2" flat washers	1/2" x 4-1/4" sleeve-type anchor bolts	1/2" nuts
Chemical Anchor Kit		
Hex nuts and washers	Chemical anchor capsules	Threaded chisel-point rods

UNPACK ATM

1. Carefully inspect the shipping container for any damage and report any damage immediately to the shipping company. Refer to the warranty information in the User or Service manual (as applicable) for information about reporting shipping damage.
2. Remove the plinth and ATM cabinet from the carton by cutting the straps and removing the top of the box.
3. Remove the packing material from inside of the box.
4. Remove the silver key from the white plastic bag attached to the ATM wrapping.

5. Stand the unit(s) up and walk them out of the shipping carton.
6. Remove the wrapping from the ATM.
7. Use the silver key to unlock both the control panel and the fascia door (which conceals the locking mechanism) on the front of the cabinet. Open the fascia door.
8. Turn the knob to open the front enclosure door. If the door is locked, open with the vault door key included or see the sidebar on this page for help in unlocking the electronic or mechanical lock, if applicable..
9. Remove the packing material from inside the vault enclosure. Next, carefully remove the dispensing mechanism. Inspect the dispenser and report any damage to Triton. Set the mechanism aside. This will be installed in later steps.
10. The accessory box is shipped inside the plinth enclosure. Open and inspect the contents. Check the contents against the enclosed packing list and report any missing parts to Triton.

UNLOCKING COMBINATION LOCKS

Mechanical Lock. There are two marks on the dial ring. The index mark at the top of the dial is used for opening the lock. A revolution is counted each time the selected number is aligned with the opening index.

Locks are shipped on a factory setting of '50'. To unlock, turn the dial to the left (counterclockwise) **FOUR** (4) turns, stopping on '50'. Then turn the dial to the right (clockwise) until the bolt is retracted.

Electronic Lock. The combination of the lock is preset to **1-2-3-4-5-6**. To unlock, enter the preset combination and check for proper operation. After each keypress, the lock will beep. After the final digit has been entered, the lock will beep twice, and the open period begins. When a valid combination has been entered, the operator will have approximately 3 seconds to open the lock. To open the lock, turn the outer ring of the dial clockwise. After the lock is opened, the vault door may be opened.

The next procedures are for anchoring the plinth.

SELECTING THE INSTALLATION LOCATION

Choosing the right location for your ATM is very important. Security concerns suggest a location that is away from any door or external access point. Ideally, the terminal should be mounted as close to a back wall as possible. For marketing reasons, however, it may be desirable to locate the terminal near the front where your customers can easily locate it. Wherever you decide to locate the terminal, be sure to follow the recommended procedures for both mounting the terminal and for removing cash when the unit will be unattended.

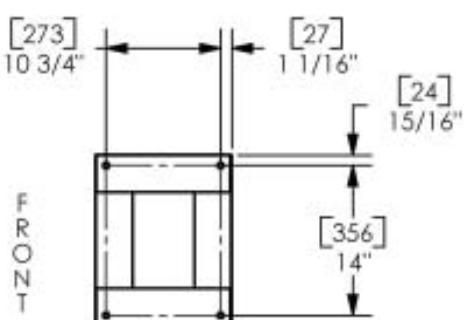
Mark/Drill Mounting Holes

NOTE
The Model 8100 ATM is designed
for indoor use only!

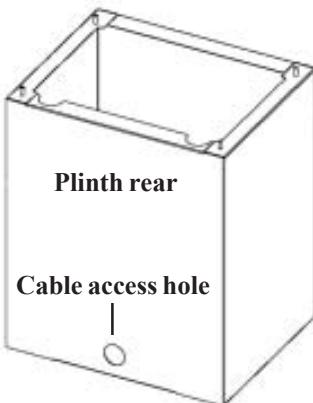
Mark the location of the plinth mounting holes on the concrete floor. This is accomplished as described below:

1. Move the plinth to the location where it will be installed.

Locate the four anchor-bolt holes (cutouts) in the bottom of the plinth. Use a felt-tip pen or other marker to carefully mark the center of each of these four holes on the floor; these marks will serve as guides for the anchor bolt holes that will be drilled in the next step. Move the plinth aside to provide clear access to the mounting hole marks. Center punch each mark to help align the drill bit.



*Mounting hole drill template
(Not to scale).*

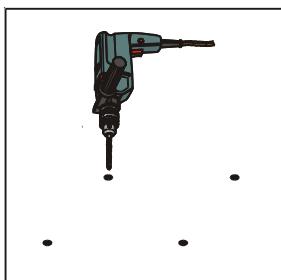


Plinth.

TOOL USE/SAFETY

Observe ALL safety precautions for operating hand and power tools! Wear eye and ear protection while operating the electric drill!

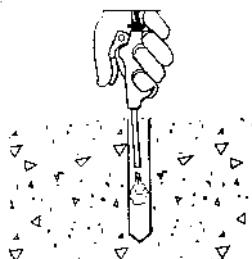
2. Use a 1/4" (6 mm) diameter carbide-tipped masonry bit to drill four pilot holes at the drilling points marked in the previous step. Drill the pilot holes approximately 1/2" (12 mm) deep into the floor. These holes will help guide the masonry bit that will be used to drill the anchor-bolt holes in the next step.
3. **Standard anchors:** Use a 1/2" (12 mm) diameter carbide-tipped masonry bit to drill four holes at least 2-3/4" (70 mm) deep into the floor. Be sure to take into account the depth of any floor covering, such as tile or vinyl when gauging the depth of the anchor holes. *Make sure the holes are drilled at least 2- 3/4" into the concrete floor.*
- 3a. **Chemical anchors:** Use a 15 mm (9/16") diameter carbide-tipped masonry bit to drill four holes at least 115 mm (4-1/2") deep into the floor. Be sure to take into account the depth of any floor covering, such as tile or vinyl when gauging the depth of the anchor holes. *Make sure the holes are drilled at least 4- 1/2-inches) into the concrete floor.*
4. Use a portable vacuum cleaner to remove any dust or debris that may have fallen into the holes during the drilling process.



Drill anchor holes

CONCRETE STRENGTH

The floor at the installation location should consist of commercial-grade concrete measuring at least **2000 psi** in compression strength. *The full effectiveness of the mounting anchors depends upon meeting this specification!* Check with the contractor/builder or owner of the installation to verify that this requirement can be satisfied.

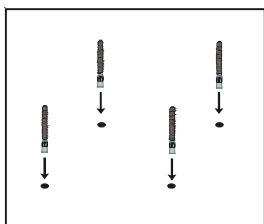


Blow out dust/debris.

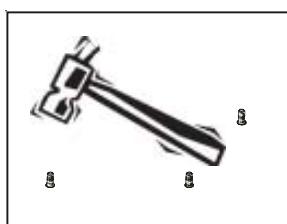
Install Standard Anchors Bolt Plinth to Floor

1. Move the plinth into position for mounting by aligning the base over the four holes drilled in the previous procedure.
2. Place an anchor bolt through the plinth base and into one of the mounting holes. Use a ball peen hammer to tap the bolt completely into the hole.

IMPORTANT: If the anchor bolt “falls” into the hole without needing to be tapped in, the hole is too large! The mounting-hole pattern will have to be moved and redrilled using smaller holes as necessary to achieve a snug fit.



Place anchor bolts in mounting holes.

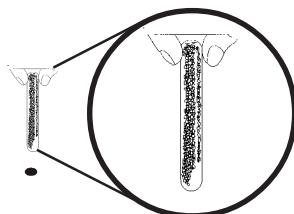


Tap anchor bolts into mounting holes.

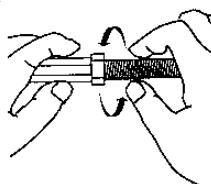
3. Place a flat washer on the anchor bolt followed by a 1/2" nut.
4. Repeat Steps 2 and 3 for the remaining anchor bolts.
5. Ensure the plinth is as level as possible given the floor conditions. Use a bubble level to verify this. If a bubble-level is not available, the plinth can be “rocked” gently from front-to-back and side-to-side to check the need for leveling.
6. Use a torque wrench and 3/4" socket to tighten each nut to a torque setting of **60 foot-pounds (required to establish the maximum pull-out strength of the anchors)**. If a torque wrench is not available, use a ratchet wrench and 3/4" socket to tighten the nuts **three full turns beyond hand tight**.
7. Once the nuts are tightened as specified in Step 6, ***install a second nut on each bolt and tighten down firmly.***

Install Chemical Anchors Bolt Plinth to Floor

1. Move the plinth into position for mounting by aligning the base over the four holes drilled in the previous procedure.
2. Begin by inserting a Chem Stud capsule into one of the mounting holes. Either end of the capsule may be inserted first.
3. Place a washer and a nut (in that order) onto a chisel point rod. Thread the nut onto the rod, leaving 3 to 4 threads exposed.
4. Thread the rod coupler onto the threaded rod until it is tight against the nut. The threaded rod used should be free of dirt, grease, oil or other foreign material.
5. Select the drive unit, insert it into a rotary hammer drill and engage the coupling to be used.



*Insert Chem Stud capsule in
mounting hole.*



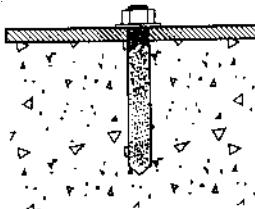
*Prepare chisel point anchor rod. Add
washer and nut.*

6. Insert the chisel point of the rod into the hole to break the glass capsule. Spin it into the capsule at a speed of **250 to 500 RPM**, until it is fully embedded.
IMPORTANT! Turn the rotary hammer drill OFF IMMEDIATELY when the rod is fully embedded!



*Drive anchor rod into capsule using
hammer drill.*

7. Pull the driver out of the coupling while holding the rod. Hold the hex nut with a wrench to unthread the coupler.
8. Repeat steps 1-7 for each of the remaining mounting holes.
9. Allow the adhesive to cure for the specified time (see chart and important note, which follow) prior to applying any load to the anchors. During the winter, the hole temperature may be different than the room temperature! The hole temperature should be measured to determine the curing time required. ***DO NOT disturb or load the anchors until they are fully cured!***



Allow seated anchor to cure.

Base Material Temperature*	Setting Time
68° F / 20° C and over	20 minutes
50° F / 10° C to 68° F / 20° C	30 minutes
32° F / 0° C to 50° F / 10° C	1 hour
23° F / -5° C to 32° F / 0° C	5 hours
14° F / -10° C to 23° F / -5° C	10 hours

10. Ensure the plinth is as level as possible given the floor conditions. Use a bubble level to verify this. If a bubble-level is not available, the cabinet can be “rocked” gently from front-to-back and side-to-side to check the need for leveling.
11. Use an adjustable crescent wrench or a ratchet wrench with 18 mm (3/4-inch) socket to tighten the nuts down. ***No minimum torque setting for the nuts is required.*** Simply ensure the nuts are tightened down firmly enough to secure the plinth to the anchors. Tightening the nuts just beyond hand tight should prove adequate.
12. Once the plinth is square (level), install a second nut on each bolt and tighten down firmly.

Mount/Install ATM

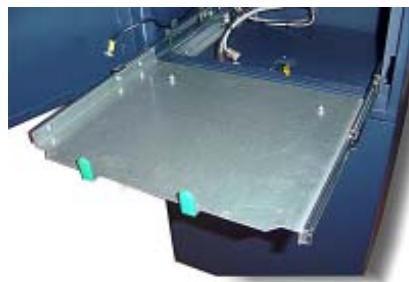
TOOLS: #2 Phillips screwdriver
7/16" nutdriver or equivalent

NOTICE

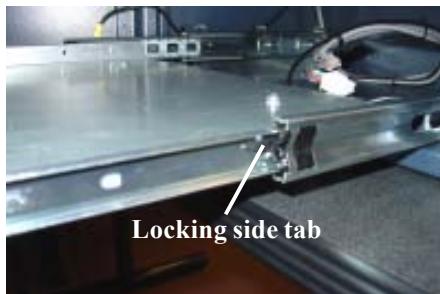
It is **highly** recommended that steps requiring lifting of the ATM cabinet be performed by 2 personnel.

Before mounting the ATM cabinet to the plinth, some preliminary steps may be helpful for ease of installation.

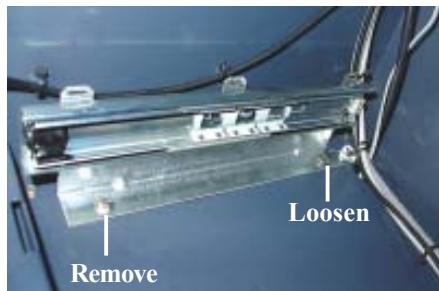
- ↳ Lift/place the ATM cabinet on a table, bench, etc. Open the security door and slide the dispenser tray out fully. This will be temporarily removed.



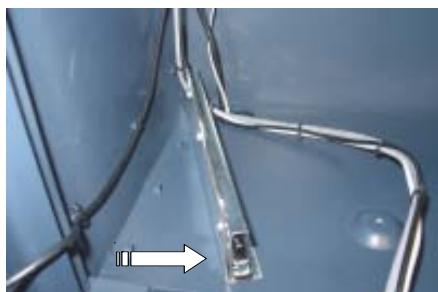
- ↳ Locate the locking slide tabs on each side of the slide rails. Push tabs up/down on each side and remove tray from rails. Push rails back into cabinet and set tray aside.



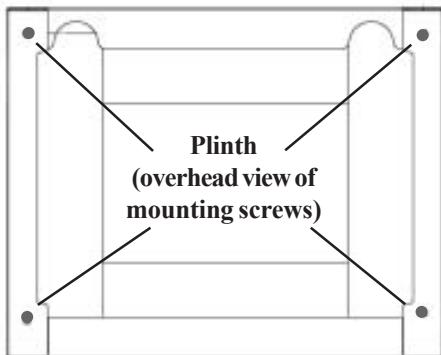
↳ Using a phillips screwdriver, remove the two (2) front screws that secure the rail assemblies; retain screws. Next, loosen the back screws.



↳ Pivot each slide rail slightly inward. This will allow easier access to secure the nuts to the plinths mounting screws when installing the ATM cabinet..



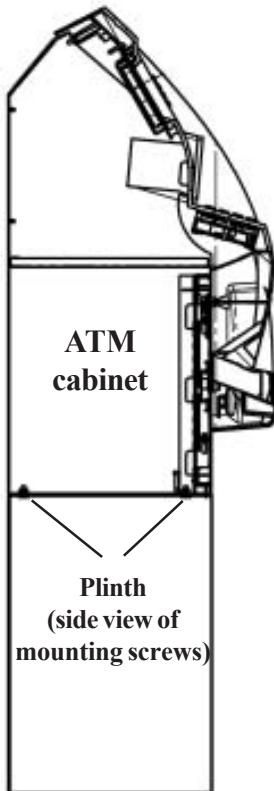
1. Lift the ATM cabinet and mount on the plinth assembly's four (4) mounting screws.



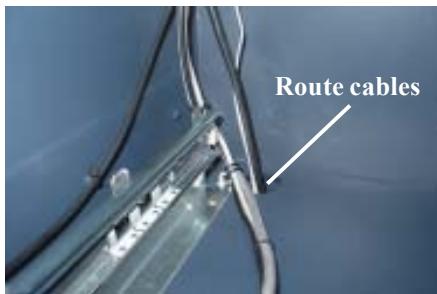
Front

INSTALLATION PROCEDURES

2. Secure the assemblies together using the four (4) nuts provided with a 7/16" nutdriver or equivalent.



3. Pivot the slide rail assemblies back and secure/tighten all screws previously removed/loosened.
4. Route the ATM power and phone line cables through the cabinet access hole into the plinth assembly. Pull the cables out through the rear access hole of the plinth.



Suggestion

Secure the two cables together using a ty wrap, rubber band, etc. It will be easier to "grab" the power cable from the plinth's rear access hole and both cables will come out together.

5. Reinstall the dispenser tray into the slide rail assemblies.

The next procedures describe installing the TDM-50 dispensing mechanism.

INSTALLING THE TDM-50 DISPENSING MECHANISM



1. Refer to Figure 1. Unlock and open the control panel. Verify that the power switch is in the OFF (0) position. Close the control panel.

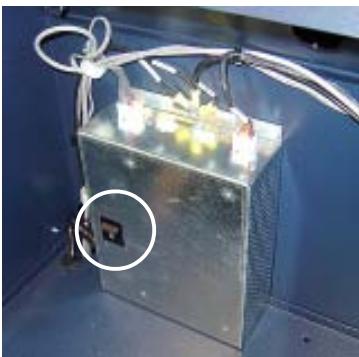


Figure 1. Power switch location.

2. Slide the dispenser mounting tray to its fully extended position (Figure 2).

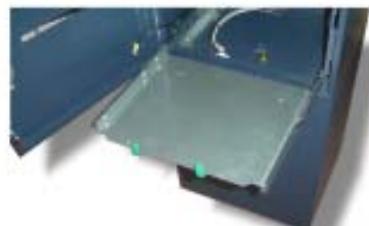


Figure 2. Dispenser mounting tray fully extended.

Four, 6-32 x 5/16 phillips screws (02054-00098) are required to attach the dispensing mechanism to the mounting tray. The screws are pre-installed on the tray.

3. Mounting tray. Using a phillips screwdriver, remove the front two (2) screws and loosen the rear 2. Retain the front screws. The rear screws will act as a guide for installing the dispenser. **DO NOT** tighten these screws at this time.



Figure 3. Loosen phillip screws in rear mounting holes.

INSTALLATION PROCEDURES

4. Place the TDM-50 on the mounting tray with the cassette facing into the security cabinet. Align and slide the slots on the rear bottom of the dispenser under the two (2) screws previously installed (Figure 4).
5. Install the two (2) front phillip screws back into the holes at the front of the dispenser shown in Figure 5. Tighten all the screws.



Figure 4. Align slots of dispenser under screws.



Figure 5. Install front mounting screws.

6. Connect the dispenser data, power, and ground wire cables to their respective connections on the left side of the TDM-50 (Figure 6).

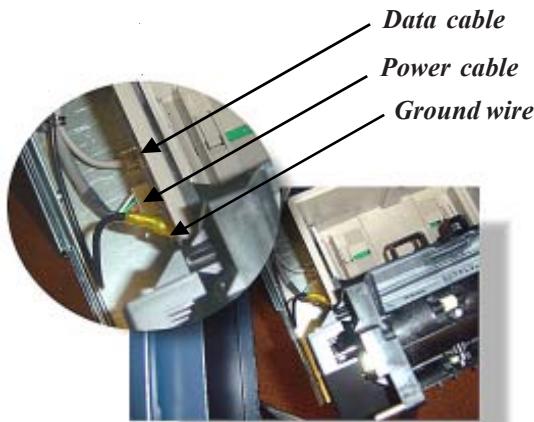


Figure 6. Dispenser cable connections.

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POWER AND COMMUNICATION

ROUTE / CONNECT AC POWER AND TELEPHONE LINE

1. Ensure the power and phone cables are routed through the cabinet access hole as shown in Figure 1.
2. Route the AC power cord and the phone cord through either the plinth or alternate access hole (as applicable) as shown in Figure 2.
3. Connect the AC power cord and phone cable to their respective facility outlets.
4. Open the control panel and turn the power switch ON (I).

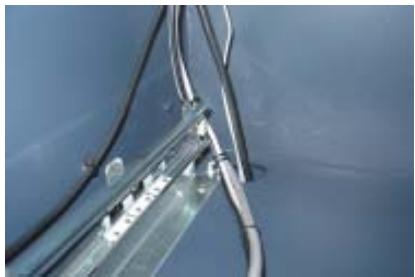
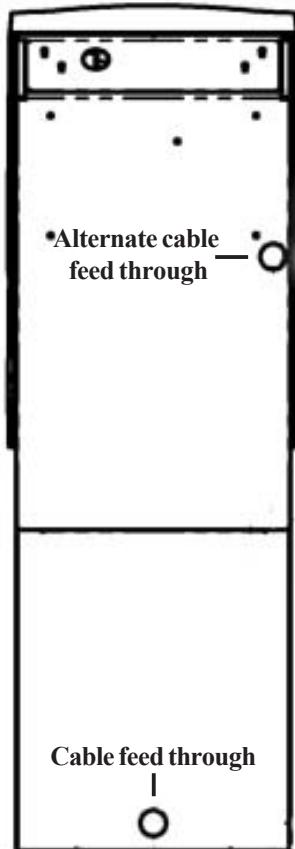


Figure 1. Power/phone cable routing.



POWER OUTLET ACCESSIBILITY

Whether you are installing a new AC socket outlet or plan to use an existing outlet to supply power to the ATM, make sure the following requirements are met:

1. The outlet is located near the equipment.
2. AC power for the terminal should come from a dedicated source with an isolated ground. The ATM is designed to work on an IT (Isolated-Terra) type power system having a phase-to-phase voltage not exceeding 240 volts.
3. The outlet is easily accessible and will not be blocked once the equipment is installed.

Figure 2. Power and phone cords routed through either access hole.

APPENDIX B
COMBINATION LOCKS

INTRODUCTION

The security cabinet can be secured using either a mechanical or electronic combination lock. This appendix covers how to change the combination of either lock. Procedures specific to the electronic lock, such as changing the battery, are also covered. The first section covers the Mechanical combination lock.

OPERATING THE MECHANICAL LOCK

UNLOCKING THE LOCK

There are two marks on the dial ring (see drawing opposite page). The index at the top is used for opening the lock, The index 30 degrees to the left is used only when changing the combination.

The dial should always be turned slowly and evenly. A revolution is counted each time the selected number is aligned with the opening index. ***Do not turn the dial back to compensate for over-dialing a number.*** If, when dialing the combination, any number is turned beyond the index, the entire sequence must be repeated.

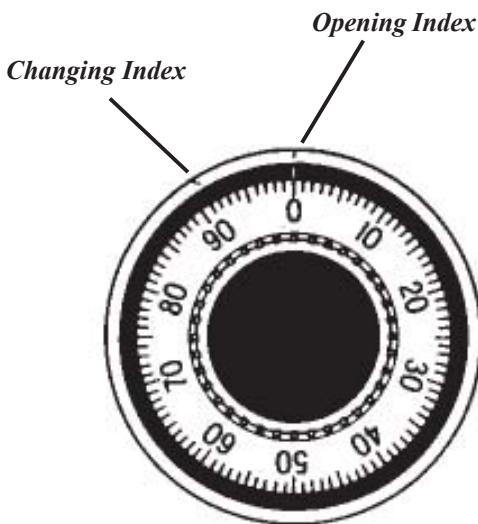
Locks are shipped on a factory setting of '50'. Using the '**Opening Index**', to unlock, turn the dial to the left (counterclockwise) four (4) turns, stopping on '50'. Then, turn the dial to the right until the dial stops. The combination lock bolt will retract and the safe door may be opened.

Unlocking 3-number combinations (For Example, "50-25-50")

1. Turn the dial to the **Left** at least four (4) complete turns to clear the combination lock to accept the combination.
2. Using the '**Opening Index**', turn the dial to the **Left**, stopping when '50' is aligned with the opening index, the **Fourth** time.
2. Turn the dial to the **Right**, stopping when '25' is aligned with the opening index, the **Third** time.
3. Turn the dial to the **Left**, stopping when '50' is aligned with the opening index, the **Second** time.
4. Turn the dial slowly to the **Right** until the bolt retracts.

LOCKING THE LOCK

Turn the dial to the **Left** at least four full revolutions.



Changing the Combination

CHANGE THE COMBINATION:

To change the combination, you will need access to the existing combination and a change key. First, open the safe door by dialing the existing combination. With bolt retracted and before changing combination, verify that the dial stopped between 90 and 100 on the '*Opening Index*'.

Select three new numbers. **DO NOT** use any number between **1 and 20** for the last number.

For maximum security, do not use numbers that end in 0 or 5, and do not use numbers in sequence: e.g., '27-48-86' is not as good as '27-86-48". Perform the following steps next:

1. Dial the existing combination again using the '*Change Index*', but **STOP** the dial on the last number of the combination.
2. With the last number set at the changing index, hold the dial securely and insert the change key in the keyhole in the back of the lock. Make sure the wing is entirely inside the lock and comes to a positive stop (see Figure 1) before turning the key.

Note: *If the change key will not go in, the wheels are not lined up to be changed and you must dial the combination again on the Change Index.*

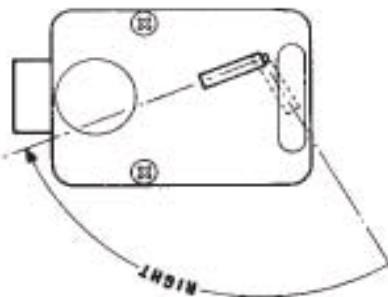


Figure 1

3. Turn change key to the **Left** until it stops (approximately one-quarter turn). With the change key in this position, set the new combination as follows:
Note: Never select a number from 0 to 20 (the forbidden zone) as the last number of the combination.
4. Using the '**Change Index**', turn the dial to the **Left** stopping when the first number of the new combination aligns with the '**Change Index**', the **Fourth** time.
5. Turn dial to the **Right**, stopping when the second number is aligned with the '**Change Index**', the **Third** time.
6. Turn the dial to the **Left**, stopping when the third number is aligned with the '**Change Index**', the **Second** time. Holding the dial in this position, turn the change key back to the **Right** and remove it. (See Figure 1.) The new combination you have chosen is now set in the lock,

Important

Before closing the vault door, try the new combination several times using the 'Opening Index'.

OPERATING THE ELECTRONIC LOCK

The electronic lock combination consists of six digits. Upon arrival, the combination of the lock should already be preset to **1-2-3-4-5-6**.

ENTERING THE COMBINATION

1. Enter the preset combination and check for proper operation. After each keypress, the lock will beep. After the final digit has been entered, the lock will beep **twice**, and the open period will begin.
2. When a valid combination has been entered, the operator will have approximately **4 seconds** to open the lock.
3. To open the lock, turn the **dial** clockwise.
4. After the lock is opened, the cabinet door may be opened.

LOCKOUT FEATURE

The lock includes a '**Wrong Try Penalty**' lockout feature that prevents entry from unauthorized personnel. This feature performs as follows:

- Entry of four (4) consecutive invalid combinations starts a 5-minute delay period.
 - LED flashes red at ten (10) second intervals.
- At the end of the delay period, two (2) more consecutive invalid combinations will restart an additional 5-minute delay.

CHANGING THE COMBINATION

To change the combination of the lock, simply follow these directions.

1. Enter **six zeros**.
2. Enter the **current** combination (initially set at 1-2-3-4-5-6).
3. Enter the **new** six (6) digit combination **twice**.
 - If a mistake is made, wait thirty (30) seconds and repeat the first 3 steps.
4. Test lock combination several times before closing the door. The combination is now changed.

Valid Code Entry - Double signal after valid six (6) digit code is entered.

Invalid Code Entry - Triple signal and old code is still valid.

BATTERY LOW WARNING

Repeated beeping during an opening indicates that the battery is low or dead and needs to be replaced. The battery box is located on the inside of the door.

Note: If the lock will not operate (i.e. repeated beeping or no beeping) while the door is closed and locked, the battery must be energized from the two external terminals on the front of the push-button panel.

To energize the lock, connect a 9-volt alkaline battery on the external terminal points. Maintain contact, enter a valid combination, and turn the dial clockwise to open the lock.

Note: *You must maintain battery contact at all times throughout this procedure.*

CHANGING THE BATTERY

1. Open the ATM vault door. Remove the battery box cover by pulling the front portion away from the vault door.
2. The connector is easily removed by unsnapping it from the two (2) terminal on the top of the battery.
3. Remove the old battery. Install/ connect a new 9-volt alkaline battery.
4. Push the battery and the leads completely up into the battery compartment.
5. Reinstall the cover and test the unit several times before closing the vault door.

